# Refine Search

**Search Results -**

| Terms | Documents |
|---|---|
| L1 and "cardiovascular disease" | 0 |

**Database:**
US Pre-Grant Publication Full-Text Database
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JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

**Search:** L6

Refine Search | Recall Text | Clear | Interrupt

**Search History**

**DATE: Friday, August 26, 2005** Printable Copy Create Case

| Set Name side by side | Query | Hit Count | Set Name result set |
|---|---|---|---|
| *DB=USPT; PLUR=YES; OP=OR* | | | |
| L6 | L1 and "cardiovascular disease" | 0 | L6 |
| L5 | L1 and "oral administration" | 1 | L5 |
| L4 | L1 and cardiovascular disease | 165064 | L4 |
| L3 | L1 and vascular inflammation | 33747 | L3 |
| L2 | L1 and atherosclerosis | 0 | L2 |
| L1 | 6333311.pn. | 1 | L1 |

END OF SEARCH HISTORY

L5: Entry 1 of 1 File: USPT Dec 25, 2001

DOCUMENT-IDENTIFIER: US 6333311 B1
TITLE: Useful properties of human lactoferrin and variants thereof

Detailed Description Text (68):
For oral administration, human lactoferrin or variant can be administered in solid dosage forms, such as capsules, tablets, and powders, or in liquid dosage forms, such as elixirs, syrups, and suspensions. The pharmaceutical compositions of the invention can be administered with a foodstuff, typically milk, e.g., bovine milk. This mode of administration will have advantages when the lactoferrin/variant is produced by expression in a transgenic animal such as a transgenic bovine, goat, or rabbit. The production of lactoferrin in transgenic bovine milk is desirable since it provides a matrix wherein little or no purification is necessary for human consumption.

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| NEWS | 4 | FEB 28 | BABS - Current-awareness alerts (SDIs) available |
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| NEWS | 10 | MAR 22 | PATDPASPC - New patent database available |
| NEWS | 11 | MAR 22 | REGISTRY/ZREGISTRY enhanced with experimental property tags |
| NEWS | 12 | APR 04 | EPFULL enhanced with additional patent information and new fields |
| NEWS | 13 | APR 04 | EMBASE - Database reloaded and enhanced |
| NEWS | 14 | APR 18 | New CAS Information Use Policies available online |
| NEWS | 15 | APR 25 | Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAplus and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications. |
| NEWS | 16 | APR 28 | Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAplus |
| NEWS | 17 | MAY 23 | GBFULL enhanced with patent drawing images |
| NEWS | 18 | MAY 23 | REGISTRY has been enhanced with source information from CHEMCATS |
| NEWS | 19 | JUN 06 | The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available |
| NEWS | 20 | JUN 13 | RUSSIAPAT: New full-text patent database on STN |
| NEWS | 21 | JUN 13 | FRFULL enhanced with patent drawing images |
| NEWS | 22 | JUN 27 | MARPAT displays enhanced with expanded G-group definitions and text labels |
| NEWS | 23 | JUL 01 | MEDICONF removed from STN |
| NEWS | 24 | JUL 07 | STN Patent Forums to be held in July 2005 |
| NEWS | 25 | JUL 13 | SCISEARCH reloaded |
| NEWS | 26 | JUL 20 | Powerful new interactive analysis and visualization software, STN AnaVist, now available |
| NEWS | 27 | AUG 11 | Derwent World Patents Index(R) web-based training during August |
| NEWS | 28 | AUG 11 | STN AnaVist workshops to be held in North America |

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FILE 'BIOTECHDS' ENTERED AT 13:31:51 ON 26 AUG 2005
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=> s cardiovascular disease and treatment
   4 FILES SEARCHED...
L1      108329 CARDIOVASCULAR DISEASE AND TREATMENT

=> s l1 and atherosclerosis
L2       21458 L1 AND ATHEROSCLEROSIS

=> s l2 and (vascular inflammation)
L3         157 L2 AND (VASCULAR INFLAMMATION)

=> s lactoferrin and (recombinant or variant or human or bovine)
   4 FILES SEARCHED...
L4       16507 LACTOFERRIN AND (RECOMBINANT OR VARIANT OR HUMAN OR BOVINE)
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=> s l4 and treatment
L5        3332 L4 AND TREATMENT

=> s l5 and l4
L6        3332 L5 AND L4

=> s l6 and l3
L7           3 L6 AND L3   .

=> d l7 ti abs ibib tot

L7   ANSWER 1 OF 3  USPATFULL on STN
TI     Methods of treating an inflammatory-related disease
AB     The invention relates to pharmaceutical compositions and methods of
       treating inflammatory-related diseases associated with pro-inflammatory
       cytokine expression and/or reduced expression of anti-inflammatory
       cytokines. The method typically comprises administration of one or more
       compounds selected from isoindigo, indigo, indirubin, or derivatives
       thereof, such as, Meisoindigo and NATURA. Preferably the pharmaceutical
       composition comprises one or more compounds selected from isoindigo,
       indigo, indirubin, or derivatives thereof, an anti-inflammatory agent,
       and a pharmaceutically acceptable carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER:        2005:177965  USPATFULL
TITLE:                   Methods of treating an inflammatory-related disease
INVENTOR(S):             Wang, Longgui, Flushing, NY, UNITED STATES
                         Liu, Xiao Mei, Flushing, NY, UNITED STATES
                         Mo, Lian, Palo Alto, CA, UNITED STATES
                         Mencher, Simon K., New York, NY, UNITED STATES
                         McCarron, James P. JR., New York, NY, UNITED STATES

                              NUMBER        KIND    DATE
                         ---------------- ------ --------
PATENT INFORMATION:      US 2005154046      A1   20050714
APPLICATION INFO.:       US 2004-754547     A1   20040112  (10)
DOCUMENT TYPE:           Utility
FILE SEGMENT:            APPLICATION
LEGAL REPRESENTATIVE:    WINSTON & STRAWN LLP, 1700 K STREET, N.W., WASHINGTON,
                         DC, 20006, US
NUMBER OF CLAIMS:        34
EXEMPLARY CLAIM:         1
NUMBER OF DRAWINGS:      8 Drawing Page(s)
LINE COUNT:              2680
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7   ANSWER 2 OF 3  USPATFULL on STN
TI     Lactoferrin in the reduction of circulating cholesterol,
       vascular inflammation, atherosclerosis and
       cardiovascular disease
AB     The present invention relates to methods of using lactoferrin
       (LF) to reduce circulating levels of cholesterol and vascular
       inflammation, in order to treat, prevent or reduce the incidence
       of atherosclerosis and cardiovascular
       disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER:        2004:197318  USPATFULL
TITLE:                   Lactoferrin in the reduction of circulating
                         cholesterol, vascular inflammation,
                         atherosclerosis and cardiovascular
                         disease
```

INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Glynn, Peter, Houston, TX, UNITED STATES
Wang, Yenyun, Houston, TX, UNITED STATES
Engelmayer, Jose, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004152623 | A1 | 20040805 |
| APPLICATION INFO.: | US 2003-728275 | A1 | 20031204 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-430867P | 20021204 (60) |
| | US 2003-498337P | 20030827 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 3 OF 3 USPATFULL on STN
TI Immune modulation method using steroid compounds
AB The invention provides compositions comprising formula 1 steroids, e.g., 16α-bromo-3 β-hydroxy-5α-androstan-17-one hemihydrate and one or more excipients, including compositions that comprise a liquid formulation comprising less than about 3% v/v water. The compositions are useful to make improved pharmaceutical formulations. The invention also provides methods of intermittent dosing of steroid compounds such as analogs of 16α-bromo-3β-hydroxy-5α-androstan-17-one and compositions useful in such dosing regimens. The invention further provides compositions and methods to inhibit pathogen replication, ameliorate symptoms associated with immune dysregulation and to modulate immune responses in a subject using the compounds. The invention also provides methods to make and use these immunomodulatory compositions and formulations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2003:86817 USPATFULL
TITLE: Immune modulation method using steroid compounds
INVENTOR(S): Ahlem, Clarence N., San Diego, CA, UNITED STATES
Frincke, James M., San Diego, CA, UNITED STATES
dos Anjos de Carvalho, Luis Daniel, Paio Pires, PORTUGAL
Heggie, William, Palmela, PORTUGAL
Prendergast, Patrick T., County Kildare, IRELAND
Reading, Christopher L., San Diego, CA, UNITED STATES
Thadikonda, Krupakar Paul, Gaithersburg, MD, UNITED STATES
Vernon, Russell N., Oak Hills, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2003060425 | A1 | 20030327 |
| APPLICATION INFO.: | US 2001-820483 | A1 | 20010329 (9) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-449184, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-414905, filed on 8 Oct 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-449004, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser.

No. US 2000-535675, filed on 23 Mar 2000, PENDING
Continuation-in-part of Ser. No. US 1999-449042, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-675470, filed on 28 Sep 2000, PENDING Continuation-in-part of Ser. No. US 2000-586673, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-586672, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-461026, filed on 15 Dec 1999, ABANDONED

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1998-109924P | 19981124 (60) |
| | US 1999-140028P | 19990616 (60) |
| | US 1998-109923P | 19981124 (60) |
| | US 1999-126056P | 19991019 (60) |
| | US 1999-124087P | 19990311 (60) |
| | US 1998-110127P | 19981127 (60) |
| | US 1999-161453P | 19991025 (60) |
| | US 1999-145823P | 19990727 (60) |
| | US 1999-137745P | 19990603 (60) |
| | US 1998-112206P | 19981215 (60) |
| | US 2000-257071P | 20001220 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HOLLIS-EDEN PHARMACEUTICALS, INC., 4435 EASTGATE MALL, SUITE 400, SAN DIEGO, CA, 92121
NUMBER OF CLAIMS: 54
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 14708
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 13:28:26 ON 26 AUG 2005)

FILE 'MEDLINE, BIOSIS, WPIDS, DGENE, EMBASE, SCISEARCH, USPATFULL, BIOTECHDS' ENTERED AT 13:31:51 ON 26 AUG 2005

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L1       108329 S CARDIOVASCULAR DISEASE AND TREATMENT
L2        21458 S L1 AND ATHEROSCLEROSIS
L3          157 S L2 AND (VASCULAR INFLAMMATION)
L4        16507 S LACTOFERRIN AND (RECOMBINANT OR VARIANT OR HUMAN OR BOVINE)
L5         3332 S L4 AND TREATMENT
L6         3332 S L5 AND L4
L7            3 S L6 AND L3
```

=> s l6 and (reduce LDL or VLDL)
L8 63 L6 AND (REDUCE LDL OR VLDL)

=> s l8 and lactoferrin
L9 63 L8 AND LACTOFERRIN

=> d l9 ti abs ibib 1-15

L9 ANSWER 1 OF 63 MEDLINE on STN
TI **Lactoferrin** binding to heparan sulfate proteoglycans and the LDL receptor-related protein. Further evidence supporting the importance of direct binding of remnant lipoproteins to HSPG.
AB **Bovine lactoferrin** inhibits the clearance of remnant lipoproteins from the plasma and competes with the cell-surface binding of apolipoprotein (apo) E-enriched remnants. We established that

**lactoferrin** inhibits remnant binding and uptake by interacting with both heparan sulfate proteoglycans (HSPG) and the low-density lipoprotein receptor-related protein (LRP). The binding of 125I-**lactoferrin** was inhibited 45% to 60% in HepG2 hepatocytes and wild-type Chinese hamster ovary (CHO) cells treated with heparinase to remove HSPG. In mutant CHO cells (pgsD-677) lacking HSPG, the level of 125I-**lactoferrin** binding was approximately 50% that seen with wild-type CHO cells; thus, about one half of **lactoferrin** binding appears to be mediated through cell-surface HSPG. A significant fraction of the residual binding of the **lactoferrin** appears to be mediated through the LRP. The 39-kd protein known to bind to the LRP and to block ligand interaction inhibited 125I-**lactoferrin** degradation in wild-type CHO cells by 60% to 65%. The addition of the 39-kd protein plus heparinase **treatment** reduced the binding by 85% to 90% (this combination blocks direct interaction with both the LRP and HSPG). However, it was also shown that the 39-kd protein bound to HSPG and the LRP. Heparinase **treatment** of wild-type CHO cells decreased the binding of the 125I-39-kd protein by approximately 40%, and the mutant CHO cells lacking HSPG bound half as much 125I-39-kd protein as wild-type CHO cells. (ABSTRACT TRUNCATED AT 250 WORDS)

ACCESSION NUMBER: 95072002 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7526899
TITLE: **Lactoferrin** binding to heparan sulfate proteoglycans and the LDL receptor-related protein. Further evidence supporting the importance of direct binding of remnant lipoproteins to HSPG.
AUTHOR: Ji Z S; Mahley R W
CORPORATE SOURCE: Gladstone Institute of Cardiovascular Disease, Cardiovascular Research Institute, San Francisco, CA 94141-9100.
CONTRACT NUMBER: HL41633 (NHLBI)
SOURCE: Arteriosclerosis and thrombosis : a journal of vascular biology / American Heart Association, (1994 Dec) 14 (12) 2025-31.
Journal code: 9101388. ISSN: 1049-8834.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199412
ENTRY DATE: Entered STN: 19950116
Last Updated on STN: 19960129
Entered Medline: 19941230

L9 ANSWER 2 OF 63 MEDLINE on STN
TI Cellular catabolism of normal very low density lipoproteins via the low density lipoprotein receptor-related protein/alpha 2-macroglobulin receptor is induced by the C-terminal domain of lipoprotein lipase.
AB Lipoprotein lipase (LPL) binds to the low density lipoprotein receptor-related protein (LRP)/alpha 2-macroglobulin receptor and induces catabolism of normal **human** very low density lipoproteins ( **VLDL**) via LRP in vitro. Recent studies showed that the C-terminal domain of LPL can bind LRP in solid phase assays and inhibit cellular catabolism of two LRP ligands, activated alpha 2-macroglobulin and the 39-kDa receptor-associated protein (Williams, S.E., Inoue, I., Tran, H., Fry, G. L., Pladet, M.W., Iverius, P.-H., Lalouel, J.-M., Chappell, D.A., and Strickland, D.K. (1994) J. Biol. Chemical 269, 8653-8658). The current study investigated the potential for this region of LPL to promote cellular catabolism of **VLDL** via LRP. A fragment comprising the C-terminal domain of LPL (designated LPLC) was expressed in bacteria and found to promote cellular binding, uptake, and degradation of normal **human VLDL** in a dose-dependent manner. These effects were present whether LPLC was added simultaneously with 125I-**VLDL**

or was prebound to cell surfaces prior to the assay. Mutations involving Lys407, Trp393, Trp394, or deletion of the C-terminal 14 residues reduced the effects of LPLC. Three LRP-binding proteins, the receptor-associated protein, **lactoferrin**, and a polyclonal antibody against LRP, competed for 125I-**VLDL** degradation induced by LPLC. Heparin or heparinase **treatment** of cells prevented LPLC-induced 125I-**VLDL** catabolism. Thus, cell-surface proteoglycans play an important role in this pathway. Interestingly, either LPLC or LPL when added in excess could block LPL-induced 125I-**VLDL** degradation presumably by interacting directly with LRP. However, unlabeled **VLDL** could not prevent catabolism of 125I-labeled LPLC or LPL. These data show that cellular fates for **VLDL** versus LPLC or LPL are divergent. This is probably due to independent catabolism of the latter via cell-surface proteoglycans. In summary, these in vitro studies indicate that a fragment of LPL corresponding to the C-terminal domain mimics the native enzyme with respect to induction of **VLDL** catabolism via LRP. Because LPLC lacks the catalytic site of native LPL, these studies establish that lipase activity is not required for LRP-mediated lipoprotein catabolism.

ACCESSION NUMBER: 94299514 MEDLINE
DOCUMENT NUMBER: PubMed ID: 7517936
TITLE: Cellular catabolism of normal very low density lipoproteins via the low density lipoprotein receptor-related protein/alpha 2-macroglobulin receptor is induced by the C-terminal domain of lipoprotein lipase.
AUTHOR: Chappell D A; Inoue I; Fry G L; Pladet M W; Bowen S L; Iverius P H; Lalouel J M; Strickland D K
CORPORATE SOURCE: Department of Internal Medicine, University of Iowa College of Medicine, Iowa City 52242.
CONTRACT NUMBER: GM42581 (NIGMS)
HL30200 (NHLBI)
HL49264 (NHLBI)
+
SOURCE: Journal of biological chemistry, (1994 Jul 8) 269 (27) 18001-6.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199408
ENTRY DATE: Entered STN: 19940818
Last Updated on STN: 19960129
Entered Medline: 19940808

L9 ANSWER 3 OF 63 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI **Lactoferrin** binding to heparan sulfate proteoglycans and the LDL receptor-related protein: Further evidence supporting the importance of direct binding of remnant lipoproteins to HSPG.
AB **Bovine lactoferrin** inhibits the clearance of remnant lipoproteins from the plasma and competes with the cell-surface binding of apolipoprotein (apo) E-enriched remnants. We established that **lactoferrin** inhibits remnant binding and uptake by interacting with both heparan sulfate proteoglycans (HSPG) and the low-density lipoprotein receptor-related protein (LRP). The binding of 125I-**lactoferrin** was inhibited 45% to 60% in HepG2 hepatocytes and wild-type Chinese hamster ovary (CHO) cells treated with heparinase to remove HSPG. In mutant CHO cells (pgsD-677) lacking HSPG, the level of 125I-**lactoferrin** binding was apprxeq 50% that seen with wild-type CHO cells; thus, about one half of **lactoferrin** binding appears to be mediated through cell-surface HSPG. A significant fraction of the residual binding of the **lactoferrin** appears to be mediated through the LRP. The 39-kd protein known to bind to the LRP and

to block ligand interaction inhibited 125I-**lactoferrin** degradation in wild-type CHO cells by 60% to 65%. The addition of the 39-kd protein plus heparinase **treatment** reduced the binding by 85% to 90% (this combination blocks direct interaction with both the LRP and HSPG). However, it was also shown that the 39-kd protein bound to HSPG and the LRP. Heparinase **treatment** of wild-type CHO cells decreased the binding of the 125I-39-kd protein by apprxeq 40%, and the mutant CHO cells lacking HSPG bound half as much 125I-39-kd protein as wild-type CHO cells. These studies also helped to establish that most of the enhanced binding of apoE-enriched beta-very-low-density lipoproteins (beta-**VLDL**) was via HSPG and not as a direct interaction with the LRP in the absence of HSPG. Whereas apoE-enriched beta-**VLDL** at a high concentration inhibited apprxeq 45% of 125I-**lactoferrin** binding to wild-type CHO cells, 125I-**lactoferrin** binding to mutant CHO cells lacking HSPG (apparently binding to the LRP) was not inhibited by apoE-enriched beta-**VLDL**, thus further suggesting that apoE-enriched beta-**VLDL** does not interact to a major extent directly with the LRP in the absence of HSPG.

ACCESSION NUMBER: 1995:59949 BIOSIS
DOCUMENT NUMBER: PREV199598074249
TITLE: **Lactoferrin** binding to heparan sulfate proteoglycans and the LDL receptor-related protein: Further evidence supporting the importance of direct binding of remnant lipoproteins to HSPG.
AUTHOR(S): Ji, Zhong-Sheng; Mahley, Robert W. [Reprint author]
CORPORATE SOURCE: Gladstone Inst. Cardiovascular Disease, P.O. Box 419100, San Francisco, CA 94141-9100, USA
SOURCE: Arteriosclerosis and Thrombosis, (1994) Vol. 14, No. 12, pp. 2025-2031.
CODEN: ARTTE5. ISSN: 1049-8834.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Feb 1995
Last Updated on STN: 9 Feb 1995

L9 ANSWER 4 OF 63 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Cellular catabolism of normal very low density lipoproteins via the low density lipoprotein receptor-related protein/alpha-2-macroglobulin receptor is induced by the C-terminal domain of lipoprotein lipase.
AB Lipoprotein lipase (LPL) binds to the low density lipoprotein receptor-related protein (LRP)/alpha-2-macroglobulin receptor and induces catabolism of normal **human** very low density lipoproteins (**VLDL**) via LRP in vitro. Recent studies showed that the C-terminal domain of LPL can bind LRP in solid phase assays and inhibit cellular catabolism of two LRP ligands, activated alpha-2-macroglobulin and the 39-kDa receptor-associated protein (Williams, S. E., Inoue, I., Tran, H., Fry, G. L., Pladet, M. W., Iverius, P.-H., Lalouel, J.-M., Chappell, D. A., and Strickland, D. K. (1994) J. Biol. Chemical 269, 8653-8658). The current study investigated the potential for this region of LPL to promote cellular catabolism of **VLDL** via LRP. A fragment comprising the C-terminal domain of LPL (designated LPLC) was expressed in bacteria and found to promote cellular binding, uptake, and degradation of normal **human VLDL** in a dose-dependent manner. These effects were present whether LPLC was added simultaneously with 125I-**VLDL** or was prebound to cell surfaces prior to the assay. Mutations involving Lys-407, Trp-393, Trp-394, or deletion of the C-terminal 14 residues reduced the effects of LPLC. Three LRP-binding proteins, the receptor-associated protein, **lactoferrin**, and a polyclonal antibody against LRP, competed for 125I-**VLDL** degradation induced by LPLC. Heparin or heparinase **treatment** of cells prevented LPLC-induced 125I-**VLDL** catabolism. Thus, cell-surface proteoglycans play an important role in this pathway. Interestingly, either LPLC or LPL when added in excess could block LPL-induced 125I-

**VLDL** degradation presumably by interacting directly with LRP. However, unlabeled **VLDL** could not prevent catabolism of 125I-labeled LPLC or LPL. These data show that cellular fates for **VLDL** versus LPLC or LPL are divergent. This is probably due to independent catabolism of the latter via cell-surface proteoglycans. In summary, these in vitro studies indicate that a fragment of LPL corresponding to the C-terminal domain mimics the native enzyme with respect to induction of **VLDL** catabolism via LRP. Because LPLC lacks the catalytic site of native LPL, these studies establish that lipase activity is not required for LRP-mediated lipoprotein catabolism.

ACCESSION NUMBER: 1994:360473 BIOSIS
DOCUMENT NUMBER: PREV199497373473
TITLE: Cellular catabolism of normal very low density lipoproteins via the low density lipoprotein receptor-related protein/alpha-2-macroglobulin receptor is induced by the C-terminal domain of lipoprotein lipase.
AUTHOR(S): Chappell, David A. [Reprint author]; Inoue, Ituro; Fry, Glenna L.; Pladet, Marc W.; Bowen, Susan L.; Iverius, Per-Henrik; Lalouel, Jean-Marc; Strickland, Dudley K.
CORPORATE SOURCE: Dep. Intern. Med., E318 GH, Univ. Iowa Coll. Med., Iowa City, IA 52242, USA
SOURCE: Journal of Biological Chemistry, (1994) Vol. 269, No. 27, pp. 18001-18006.
CODEN: JBCHA3. ISSN: 0021-9258.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Aug 1994
Last Updated on STN: 24 Aug 1994

L9 ANSWER 5 OF 63 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

TI **Lactoferrin** binding to heparan sulfate proteoglycans and the LDL receptor- related protein: Further evidence supporting the importance of direct binding of remnant lipoproteins to HSPG.

AB **Bovine lactoferrin** inhibits the clearance of remnant lipoproteins from the plasma and competes with the cell-surface binding of apolipoprotein (apo) E- enriched remnants. We established that **lactoferrin** inhibits remnant binding and uptake by interacting with both heparan sulfate proteoglycans (HSPG) and the low-density lipoprotein receptor-related protein (LRP). The binding of 125I-**lactoferrin** was inhibited 45% to 60% in HepG2 hepatocytes and wild- type Chinese hamster ovary (CHO) cells treated with heparinase to remove HSPG. In mutant CHO cells (pgsD-677) lacking HSPG, the level of 125I- **lactoferrin** binding was .apprx.50% that seen with wild-type CHO cells; thus, about one half of **lactoferrin** binding appears to be mediated through cell-surface HSPG. A significant fraction of the residual binding of the **lactoferrin** appears to be mediated through the LRP. The 39-kd protein known to bind to the LRP and to block ligand interaction inhibited 125I-**lactoferrin** degradation in wild-type CHO cells by 60% to 65%. The addition of the 39-kd protein plus heparinase **treatment** reduced the binding by 85% to 90% (this combination blocks direct interaction with both the LRP and HSPG). However, it was also shown that the 39-kd protein bound to HSPG and the LRP. Heparinase **treatment** of wild-type CHO cells decreased the binding of the 125I-39-kd protein by .simeq.40%, and the mutant CHO cells lacking HSPG bound half as much 125I-39-kd protein as wild-type CHO cells. These studies also helped to establish that most of the enhanced binding of apoE-enriched β- very-low-density lipoproteins (β- **VLDL**) was via HSPG and not as a direct interaction with the LRP in the absence of HSPG. Whereas apoE-enriched β- **VLDL** at a high concentration inhibited .simeq.45% of 125I-**lactoferrin** binding to wild-type CHO cells, 125I-**lactoferrin** binding to mutant CHO cells lacking HSPG (apparently

binding to the LRP) was not inhibited by apoE- enriched β-**VLDL**, thus further suggesting that apoE-enriched β-**VLDL** does not interact to a major extent directly with the LRP in the absence of HSPG.

ACCESSION NUMBER: 94375642 EMBASE
DOCUMENT NUMBER: 1994375642
TITLE: **Lactoferrin** binding to heparan sulfate proteoglycans and the LDL receptor- related protein: Further evidence supporting the importance of direct binding of remnant lipoproteins to HSPG.
AUTHOR: Ji Z.-S.; Mahley R.W.
CORPORATE SOURCE: Gladstone Cardiovasc. Disease Inst., PO Box 419100,San Francisco, CA 94141-9100, United States
SOURCE: Arteriosclerosis and Thrombosis, (1994) Vol. 14, No. 12, pp. 2025-2031.
ISSN: 1049-8834 CODEN: ARTTE5
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 950105
Last Updated on STN: 950105

L9 ANSWER 6 OF 63 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

TI Cellular catabolism of normal very low density lipoproteins via the low density lipoprotein receptor-related protein/α2-macroglobulin receptor is induced by the C-terminal domain of lipoprotein lipase.

AB Lipoprotein lipase (LPL) binds to the low density lipoprotein receptor-related protein (LRP)/α2-macroglobulin receptor and induces catabolism of normal **human** very low density lipoproteins ( **VLDL**) via LRP in vitro. Recent studies showed that the C-terminal domain of LPL can bind LRP in solid phase assays and inhibit cellular catabolism of two LRP ligands, activated α2- macroglobulin and the 39-kDa receptor-associated protein (Williams, S. E., Inoue, I., Tran, H., Fry, G. L., Pladet, M. W., Iverius, P.-H., Lalouel, J.- M., Chappell, D. A., and Strickland, D. K. (1994) J. Biol. Chemical 269, 8653- 8658). The current study investigated the potential for this region of LPL to promote cellular catabolism of **VLDL** via LRP. A fragment comprising the C- terminal domain of LPL (designated LPLC) was expressed in bacteria and found to promote cellular binding, uptake, and degradation of normal **human VLDL** in a dose-dependent manner. These effects were present whether LPLC was added simultaneously with 125I-**VLDL** or was prebound to cell surfaces prior to the assay. Mutations involving Lys407, Trp393, Trp394, or deletion of the C-terminal 14 residues reduced the effects of LPLC. Three LRP-binding proteins, the receptor-associated protein, **lactoferrin**, and a polyclonal antibody against LRP, competed for 125I-**VLDL** degradation induced by LPLC. Heparin or heparinase **treatment** of cells prevented LPLC-induced 125I-**VLDL** catabolism. Thus, cell-surface proteoglycans play an important role in this pathway. Interestingly, either LPLC or LPL when added in excess could block LPL-induced 125I-**VLDL** degradation presumably by interacting directly with LRP. However, unlabeled **VLDL** could not prevent catabolism of 125I-labeled LPLC or LPL. These data show that cellular fates for **VLDL** versus LPLC or LPL are divergent. This is probably due to independent catabolism of the latter via cell-surface proteoglycans. In summary, these in vitro studies indicate that a fragment of LPL corresponding to the C-terminal domain mimics the native enzyme with respect to induction of **VLDL** catabolism via LRP. Because LPLC lacks the catalytic site of native LPL, these studies establish that lipase activity is not required for

LRP-mediated lipoprotein catabolism.
ACCESSION NUMBER: 94212843 EMBASE
DOCUMENT NUMBER: 1994212843
TITLE: Cellular catabolism of normal very low density lipoproteins via the low density lipoprotein receptor-related protein/α2-macroglobulin receptor is induced by the C-terminal domain of lipoprotein lipase.
AUTHOR: Chappel D.A.; Inoue I.; Fry G.L.; Pladet M.W.; Bowen S.L.; Iverius - P.H.; Lalouel J.-M.; Strickland D.K.
CORPORATE SOURCE: Dept. of Internal Medicine, Iowa University College of Medicine,Iowa City, IA 52242, United States
SOURCE: Journal of Biological Chemistry, (1994) Vol. 269, No. 27, pp. 18001-18006.
ISSN: 0021-9258 CODEN: JBCHA3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 940803
Last Updated on STN: 940803

L9 ANSWER 7 OF 63 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI **LACTOFERRIN** BINDING TO HEPARAN-SULFATE PROTEOGLYCANS AND THE LDL RECEPTOR-RELATED PROTEIN - FURTHER EVIDENCE SUPPORTING THE IMPORTANCE OF DIRECT BINDING OF REMNANT LIPOPROTEINS TO HSPG
AB **Bovine lactoferrin** inhibits the clearance of remnant lipoproteins from the plasma and competes with the cell-surface binding of apolipoprotein (ape) E-enriched remnants. We established that **lactoferrin** inhibits remnant binding and uptake by interacting with both heparan sulfate proteoglycans (HSPG) and the low-density lipoprotein receptor-related protein (LRP). The binding of I-125-**lactoferrin** was inhibited 45% to 60% in HepG2 hepatocytes and wild-type Chinese hamster ovary (CHO) cells treated with heparinase to remove HSPG. In mutant CHO cells (pgsD-677) lacking HSPG, the level of I-125-**lactoferrin** binding was approximate to 50% that seen with wild-type CHO cells; thus, about one half of **lactoferrin** binding appears to be mediated through cell-surface HSPG. A significant fraction of the residual binding of the **lactoferrin** appears to be mediated through the LRP. The 39-kd protein known to bind to the LRP and to block ligand interaction inhibited I-125-**lactoferrin** degradation in wild-type CHO cells by 60% to 65%. The addition of the 39-kd protein plus heparinase **treatment** reduced the binding by 85% to 90% (this combination blocks direct interaction with both the LRP and HSPG). However, it was also shown that the 39-kd protein bound to HSPG and the LRP. Heparinase **treatment** of wild-type CHO cells decreased the binding of the I-125-39-kd protein by approximate to 40%, and the mutant CHO cells lacking HSPG bound half as much I-125-39-kd protein as wild-type CHO cells. These studies also helped to establish that most of the enhanced binding of apoE-enriched beta-very-low-density lipoproteins (beta-**VLDL**) was via HSPG and not as a direct interaction with the LRP in the absence of HSPG. Whereas apoE-enriched beta-**VLDL** at a high concentration inhibited approximate to 45% of I-125-**lactoferrin** binding to wild-type CHO cells, I-125-**lactoferrin** binding to mutant CHO cells lacking HSPG (apparently binding to the LRP) was not inhibited by apoE-enriched beta-**VLDL** , thus further suggesting that apoB-enriched beta-**VLDL** does not interact to a major extent directly with the LRP in the absence of HSPG.
ACCESSION NUMBER: 1995:1518 SCISEARCH
THE GENUINE ARTICLE: PX015
TITLE: **LACTOFERRIN** BINDING TO HEPARAN-SULFATE PROTEOGLYCANS AND THE LDL RECEPTOR-RELATED PROTEIN -

FURTHER EVIDENCE SUPPORTING THE IMPORTANCE OF DIRECT BINDING OF REMNANT LIPOPROTEINS TO HSPG

AUTHOR: JI Z S (Reprint); MAHLEY R W
CORPORATE SOURCE: UNIV CALIF SAN FRANCISCO, GLADSTONE INST CARDIOVASC DIS, CARDIOVASC RES INST, SAN FRANCISCO, CA 94141; UNIV CALIF SAN FRANCISCO, DEPT PATHOL, SAN FRANCISCO, CA; UNIV CALIF SAN FRANCISCO, DEPT MED, SAN FRANCISCO, CA
COUNTRY OF AUTHOR: USA
SOURCE: ARTERIOSCLEROSIS AND THROMBOSIS, (DEC 1994) Vol. 14, No. 12, pp. 2025-2031.
ISSN: 1049-8834.
PUBLISHER: AMER HEART ASSOC, 7272 GREENVILLE AVENUE, DALLAS, TX 75231-4596.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 35
ENTRY DATE: Entered STN: 1995
Last Updated on STN: 1995
*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*

L9 ANSWER 8 OF 63 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI CELLULAR CATABOLISM OF NORMAL VERY-LOW-DENSITY LIPOPROTEINS VIA THE LOW-DENSITY-LIPOPROTEIN RECEPTOR-RELATED PROTEIN ALPHA(2)-MACROGLOBULIN RECEPTOR IS INDUCED BY THE C-TERMINAL DOMAIN OF LIPOPROTEIN-LIPASE

AB Lipoprotein lipase (LPL) binds to the low density lipoprotein receptor related protein (LRP)/alpha(2)-macroglobulin receptor and induces catabolism of normal **human** very low density lipoproteins ( **VLDL**) via LRP in vitro. Recent studies showed that the C-terminal domain of LPL can bind LRP in solid phase assays and inhibit cellular catabolism of two LRP ligands, activated alpha(2)-macroglobulin and the 39-kDa receptor-associated protein (Williams, S. E., Inoue, I., Tran, H., Fry, G. L., Pladet, M. W., Iverius, P.-H., Lalouel, J.-M., Chappell, D. A., and Strickland, D. K. (1994) J. Biol. Chemical 269, 8653-8658). The current study investigated the potential for this region of LPL to promote cellular catabolism of **VLDL** via LRP. A fragment comprising the C-terminal domain of LPL (designated LPLC) was expressed in bacteria and found to promote cellular binding, uptake, and degradation of normal **human VLDL** in a dose dependent man ner. These effects were present whether LPLC was added simultaneously with I-125-**VLDL** or was prebound to cell surfaces prior to the assay. Mutations involving Lys(407), Trp(393), Trp(394), or deletion of the C terminal 14 residues reduced the effects of LPLC. Three LRP-binding proteins, the receptor-associated protein, **lactoferrin**, and a polyclonal antibody against LRP, competed for I-125-**VLDL** degradation induced by LPLC. Heparin or heparinase **treatment** of cells prevented LPLC-induced I-125-**VLDL** catabolism. Thus, cell-surface proteoglycans play an important role in this pathway. Interestingly, either LPLC or LPL when added in excess could block LPL-induced I-125-**VLDL** degradation presumably by interacting directly with LRP. However, unlabeled **VLDL** could not prevent catabolism of I-125-labeled LPLC or LPL. These data show that cellular fates for **VLDL** versus LPLC or LPL are divergent. This is probably due to independent catabolism of the latter via cell-surface proteoglycans. In summary, these in vitro studies indicate that a fragment of LPL corresponding to the C-terminal domain mimics the native enzyme with respect to induction of **VLDL** catabolism via LRP. Because LPLC lacks the catalytic site of native LPL, these studies establish that lipase activity is not required for LRP mediated lipoprotein catabolism.

ACCESSION NUMBER: 1994:413955 SCISEARCH
THE GENUINE ARTICLE: NV422

TITLE: CELLULAR CATABOLISM OF NORMAL VERY-LOW-DENSITY LIPOPROTEINS VIA THE LOW-DENSITY-LIPOPROTEIN RECEPTOR-RELATED PROTEIN ALPHA(2)-MACROGLOBULIN RECEPTOR IS INDUCED BY THE C-TERMINAL DOMAIN OF LIPOPROTEIN-LIPASE

AUTHOR: CHAPPELL D A (Reprint); INOUE I; FRY G L; PLADET M W; BOWEN S L; IVERIUS P H; LALOUEL J M; STRICKLAND D K

CORPORATE SOURCE: UNIV IOWA, COLL MED, DEPT INTERNAL MED, E318 GH, IOWA CITY, IA 52242 (Reprint); AMER RED CROSS, BIOCHEM LAB, ROCKVILLE, MD 20855; VET AFFAIRS MED CTR, SALT LAKE CITY, UT 84148; UNIV UTAH, DEPT MED, SALT LAKE CITY, UT 84148; UNIV UTAH, HOWARD HUGHES MED INST, SALT LAKE CITY, UT 84148; UNIV UTAH, DEPT HUMAN GENET, SALT LAKE CITY, UT 84148

COUNTRY OF AUTHOR: USA

SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (8 JUL 1994) Vol. 269, No. 27, pp. 18001-18006.
ISSN: 0021-9258.

PUBLISHER: AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814.

DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: English
REFERENCE COUNT: 35
ENTRY DATE: Entered STN: 1994
Last Updated on STN: 1994

*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*

L9 ANSWER 9 OF 63 USPATFULL on STN

TI Use of p97 as an enzyme delivery system for the delivery of therapeutic lysosomal enzymes

AB The present invention provides for compositions and methods for treating, ameliorating or preventing a lysosomal storage disease by administering to a patient suffering from a lysosomal storage disease a P97 conjugated with an enzyme which is capable of transportation into the lysosomes of cells on either sides of the blood brain barrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:182913 USPATFULL
TITLE: Use of p97 as an enzyme delivery system for the delivery of therapeutic lysosomal enzymes

INVENTOR(S): Starr, Christopher M., Sonoma, CA, UNITED STATES
Zankel, Todd, Novato, CA, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2005158296 | A1 | 20050721 | |
| APPLICATION INFO.: | US 2003-501028 | A1 | 20030110 | (10) |
| | WO 2003-US894 | | 20030110 | |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2003-347758P | 20020111 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MARSHALL, GERSTEIN & BORUN LLP, 233 S. WACKER DRIVE, SUITE 6300, SEARS TOWER, CHICAGO, IL, 60606, US

NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 1880

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 10 OF 63 USPATFULL on STN

TI Methods of treating an inflammatory-related disease

AB The invention relates to pharmaceutical compositions and methods of treating inflammatory-related diseases associated with pro-inflammatory cytokine expression and/or reduced expression of anti-inflammatory cytokines. The method typically comprises administration of one or more compounds selected from isoindigo, indigo, indirubin, or derivatives thereof, such as, Meisoindigo and NATURA. Preferably the pharmaceutical composition comprises one or more compounds selected from isoindigo, indigo, indirubin, or derivatives thereof, an anti-inflammatory agent, and a pharmaceutically acceptable carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:177965 USPATFULL

TITLE: Methods of treating an inflammatory-related disease

INVENTOR(S): Wang, Longgui, Flushing, NY, UNITED STATES
Liu, Xiao Mei, Flushing, NY, UNITED STATES
Mo, Lian, Palo Alto, CA, UNITED STATES
Mencher, Simon K., New York, NY, UNITED STATES
McCarron, James P. JR., New York, NY, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2005154046 | A1 | 20050714 | |
| APPLICATION INFO.: | US 2004-754547 | A1 | 20040112 | (10) |

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: WINSTON & STRAWN LLP, 1700 K STREET, N.W., WASHINGTON, DC, 20006, US

NUMBER OF CLAIMS: 34

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Page(s)

LINE COUNT: 2680

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 11 OF 63 USPATFULL on STN

TI Single nucleotide polymorphisms predicting adverse drug reactions and medication efficacy

AB The invention provides diagnostic methods and kits including oligo and/or polynucleotides or derivatives, including as well antibodies determining whether a **human** subject is at risk of getting adverse drug reaction after statin therapy or whether the **human** subject is a high or low responder or a good a or bad metabolizer of statins. The invention provides further diagnostic methods and kits including antibodies determining whether a **human** subject is at risk for a cardiovascular disease. Still further the invention provides polymorphic sequences and other genes. The present invention further relates to isolated polynucleotides encoding a phenotype associated (PA) gene polypeptide useful in methods to identify therapeutic agents and useful for preparation of a medicament to treat cardiovascular disease or influence drug response, the polynucleotide is selected from the group comprising: SEQ ID 1-80 with allelic variation as indicated in the sequences section contained in a functional surrounding like full length cDNA for PA gene polypeptide and with or without the PA gene promoter sequence.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:144184 USPATFULL

TITLE: Single nucleotide polymorphisms predicting adverse drug reactions and medication efficacy

INVENTOR(S): Stropp, Udo, Haan, GERMANY, FEDERAL REPUBLIC OF
Schwers, Stephan, Koln, GERMANY, FEDERAL REPUBLIC OF
Kallabis, Harald, Koln, GERMANY, FEDERAL REPUBLIC OF

PATENT ASSIGNEE(S): Bayer Healthcare AG, Leverkusen, GERMANY, FEDERAL

REPUBLIC OF (non-U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2005123919 | A1 | 20050609 | |
| APPLICATION INFO.: | US 2003-505936 | A1 | 20030214 | (10) |
| | WO 2003-EP1514 | | 20030214 | |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | EP 2003-2004258 | 20020227 |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: JEFFREY M. GREENMAN, BAYER PHARMACEUTICALS CORPORATION, 400 MORGAN LANE, WEST HAVEN, CT, 06516, US
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 5260
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 12 OF 63 USPATFULL on STN
TI Compositions and methods for **treatment** of neoplastic disease
AB The present invention comprises compositions and methods for treating a tumor or neoplastic disease in a host, The methods employ conjugates comprising superantigen polypeptides or nucleic acids with other structures that preferentially bind to tumor cells and are capable of inducing apoptosis. Also provided are superantigen-glycolipid conjugates and vesicles that are loaded onto antigen presenting cells to activate both T cells and NKT cells. Cell-based vaccines comprise tumor cells engineered to express a superantigen along with glycolipids products which, when expressed, render the cells capable of eliciting an effective anti-tumor immune response in a mammal into which these cells are introduced. Included among these compositions are tumor cells, hybrid cells of tumor cells and accessory cells, preferably dendritic cells. Also provided are T cells and NKT cells activated by the above compositions that can be administered for adoptive immunotherapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:130682 USPATFULL
TITLE: Compositions and methods for **treatment** of neoplastic disease
INVENTOR(S): Terman, David S., Pebble Beach, CA, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2005112141 | A1 | 20050526 | |
| APPLICATION INFO.: | US 2004-937758 | A1 | 20040908 | (10) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-650884, filed on 30 Aug 2000, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: CENTRAL COAST PATENT AGENCY, PO BOX 187, AROMAS, CA, 95004, US
NUMBER OF CLAIMS: 81
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 12424
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 13 OF 63 USPATFULL on STN
TI Novel proteins with targeted binding
AB Methods for identifying discrete monomer domains and immuno-domains with a desired property are provided. Methods for generating multimers from

two or more selected discrete monomer domains are also provided, along with methods for identifying multimers possessing a desired property. Presentation systems are also provided which present the discrete monomer and/or immuno-domains, selected monomer and/or immuno-domains, multimers and/or selected multimers to allow their selection. Compositions, libraries and cells that express one or more library member, along with kits and integrated systems, are also included in the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | |
|---|---|
| ACCESSION NUMBER: | 2005:104996 USPATFULL |
| TITLE: | Novel proteins with targeted binding |
| INVENTOR(S): | Kolkman, Joost, Voetweg 13, BELGIUM<br>Stemmer, Willem P.C., Los Gatos, CA, UNITED STATES<br>Freskgard, Per-Ola, Norrkoping, SWEDEN |
| PATENT ASSIGNEE(S): | Avidia Research Institute, Mountain View, CA, UNITED STATES (non-U.S. corporation) |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2005089932 | A1 | 20050428 |
| APPLICATION INFO.: | US 2004-871602 | A1 | 20040617 (10) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2004-840723, filed on 5 May 2004, PENDING Continuation-in-part of Ser. No. US 2003-693056, filed on 24 Oct 2003, PENDING Continuation-in-part of Ser. No. US 2003-693057, filed on 24 Oct 2003, PENDING Continuation-in-part of Ser. No. US 2002-289660, filed on 6 Nov 2002, PENDING Continuation-in-part of Ser. No. US 2002-133128, filed on 26 Apr 2002, PENDING

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-374107P | 20020418 (60) |
| | US 2001-333359P | 20011126 (60) |
| | US 2001-337209P | 20011119 (60) |
| | US 2001-286823P | 20010426 (60) |

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|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US |
| NUMBER OF CLAIMS: | 97 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 44 Drawing Page(s) |
| LINE COUNT: | 6019 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 14 OF 63 USPATFULL on STN

TI Novel proteins with targeted binding

AB Methods for identifying discrete monomer domains and immuno-domains with a desired property are provided. Methods for generating multimers from two or more selected discrete monomer domains are also provided, along with methods for identifying multimers possessing a desired property. Presentation systems are also provided which present the discrete monomer and/or immuno-domains, selected monomer and/or immuno-domains, multimers and/or selected multimers to allow their selection. Compositions, libraries and cells that express one or more library member, along with kits and integrated systems, are also included in the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | |
|---|---|
| ACCESSION NUMBER: | 2005:62937 USPATFULL |
| TITLE: | Novel proteins with targeted binding |

INVENTOR(S): Kolkman, Joost A., Palo Alto, CA, UNITED STATES
Stemmer, Willem P.C., Los Gatos, CA, UNITED STATES
Freskgard, Per-Ola, Norrkoping, SWEDEN
PATENT ASSIGNEE(S): Avidia Research Institute, Mountain View, CA (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2005053973 | A1 | 20050310 |
| APPLICATION INFO.: | US 2004-840723 | A1 | 20040505 (10) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-693056, filed on 24 Oct 2003, PENDING Continuation-in-part of Ser. No. US 2003-693057, filed on 24 Oct 2003, PENDING Continuation-in-part of Ser. No. US 2002-289660, filed on 6 Nov 2002, PENDING Continuation-in-part of Ser. No. US 2002-133128, filed on 26 Apr 2002, PENDING

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-374107P | 20020418 (60) |
| | US 2001-333359P | 20011126 (60) |
| | US 2001-337209P | 20011119 (60) |
| | US 2001-286823P | 20010426 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS: 97
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 40 Drawing Page(s)
LINE COUNT: 6118
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 15 OF 63 USPATFULL on STN
TI Combinatorial libraries of monomer domains
AB Methods for identifying discrete monomer domains and immuno-domains with a desired property are provided. Methods for generating multimers from two or more selected discrete monomer domains are also provided, along with methods for identifying multimers possessing a desired property. Presentation systems are also provided which present the discrete monomer and/or immuno-domains, selected monomer and/or immuno-domains, multimers and/or selected multimers to allow their selection. Compositions, libraries and cells that express one or more library member, along with kits and integrated systems, are also included in the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:56597 USPATFULL
TITLE: Combinatorial libraries of monomer domains
INVENTOR(S): Kolkman, Joost A., Palo Alto, CA, UNITED STATES
Stemmer, Willem P.C., Los Gatos, CA, UNITED STATES
Freskgard, Per-Ola, UNITED STATES
PATENT ASSIGNEE(S): Avidia Research Institute, Mountain View, CA (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2005048512 | A1 | 20050303 |
| APPLICATION INFO.: | US 2003-693056 | A1 | 20031024 (10) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-289660, filed on 6 Nov 2002, PENDING Continuation-in-part of Ser. No. US 2002-133128, filed on 26 Apr 2002, PENDING

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | WO 2002-US13257 | 20020426 |
| | US 2002-374107P | 20020418 (60) |
| | US 2001-333359P | 20011126 (60) |
| | US 2001-337209P | 20011119 (60) |
| | US 2001-286823P | 20010426 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
NUMBER OF CLAIMS: 94
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 34 Drawing Page(s)
LINE COUNT: 4968
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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|---|---|---|
| E1 | 1 | VARADHACHA S/AU |
| E2 | 8 | VARADHACHA S N/AU |
| E3 | 0 --> | VARADHACHARY/AU |
| E4 | 71 | VARADHACHARY A/AU |
| E5 | 18 | VARADHACHARY A S/AU |
| E6 | 5 | VARADHACHARY ARUN S/AU |
| E7 | 16 | VARADHACHARY ATUL/AU |
| E8 | 4 | VARADHACHARY G/AU |
| E9 | 4 | VARADHACHARY G R/AU |
| E10 | 2 | VARADHACHARY GAURI/AU |
| E11 | 3 | VARADHACHARY GAURI R/AU |
| E12 | 8 | VARADHACHARY SEEVARAM N/AU |

=> s e7
L10 16 "VARADHACHARY ATUL"/AU

=> d l10 ti abs ibib tot

L10 ANSWER 1 OF 16 MEDLINE on STN
TI Purification and identification of a fatty acyl-CoA synthetase from Trypanosoma brucei.
ACCESSION NUMBER: 2004384051 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15287596
TITLE: Purification and identification of a fatty acyl-CoA synthetase from Trypanosoma brucei.
AUTHOR: Jiang David W; Werbovetz Karl A; **Varadhachary Atul** ; Cole Robert N; Englund Paul T
CORPORATE SOURCE: Department of Biological Chemistry, Johns Hopkins Medical School, Baltimore, MD 21205, USA.
CONTRACT NUMBER: AI21334 (NIAID)
SOURCE: Molecular and biochemical parasitology, (2004 May) 135 (1) 149-52.
Journal code: 8006324. ISSN: 0166-6851.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200501
ENTRY DATE: Entered STN: 20040804
Last Updated on STN: 20050128
Entered Medline: 20050127

L10 ANSWER 2 OF 16 MEDLINE on STN
TI Oral lactoferrin inhibits growth of established tumors and potentiates

conventional chemotherapy.

AB In this work, we investigated the anticancer activity of orally administered recombinant human lactoferrin (rhLF) alone and in combination with chemotherapy in tumor-bearing mice. rhLF inhibited the growth of squamous cell carcinoma (O12) tumors in T cell-immunocompromised nu/nu mice by 80% when administered at 1,000 mg/kg (2.9 g/m2) by oral gavage twice daily for 8 days ($p < 0.001$). Similar activity was observed in syngeneic, immunocompetent BALB/c mice, where orally administered rhLF (1,000 mg/kg, 2.9 g/m2 once daily) halted the growth of mammary adenocarcinoma TUBO. Oral rhLF (200 mg/kg, 0.57 g/m2) was also used alone and in combination with cis-platinum (5 mg/kg) to treat head-and-neck squamous cell carcinoma in a syngeneic murine model. Monotherapy with oral rhLF or cis-platinum caused 61% or 66% tumor growth inhibition over placebo, respectively. Mice receiving both therapies showed 79% growth inhibition, a statistically significant improvement over each drug alone. We then demonstrated that administration of oral rhLF (300 mg/kg, 0.86 g/m2) to tumor-bearing or naive mice resulted in (i) significantly increased production of IL-18 in the intestinal tract, (ii) systemic NK cell activation and (iii) circulating CD8+ T-cell expansion. These data suggest that oral rhLF is an immunomodulatory agent active against cancer as a single agent and in combination chemotherapy, exerting its systemic effect through stimulation of IL-18 and other cytokines in the gut enterocytes. rhLF has been administered orally to 211 people without a single serious drug-related adverse event. Thus, rhLF shows promise as a safe and well-tolerated novel immunomodulatory anticancer agent.


ACCESSION NUMBER: 2004318824 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15221967
TITLE: Oral lactoferrin inhibits growth of established tumors and potentiates conventional chemotherapy.
AUTHOR: **Varadhachary Atul**; Wolf Jeffrey S; Petrak Karel; O'Malley Bert W Jr; Spadaro Michela; Curcio Claudia; Forni Guido; Pericle Federica
CORPORATE SOURCE: Agennix, Inc., Houston, TX 77046, USA.. avaradhachary@agennix.com
SOURCE: International journal of cancer. Journal international du cancer, (2004 Sep 1) 111 (3) 398-403. Journal code: 0042124. ISSN: 0020-7136.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200408
ENTRY DATE: Entered STN: 20040629
Last Updated on STN: 20040828
Entered Medline: 20040827

L10 ANSWER 3 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Purification and identification of a fatty acyl-CoA synthetase from Trypanosoma brucei.
ACCESSION NUMBER: 2004:428657 BIOSIS
DOCUMENT NUMBER: PREV200400430105
TITLE: Purification and identification of a fatty acyl-CoA synthetase from Trypanosoma brucei.
AUTHOR(S): Jiang, David W.; Werbovetz, Karl A.; **Varadhachary, Atul**; Cole, Robert N.; Englund, Paul T. [Reprint Author]
CORPORATE SOURCE: Dept Biol Chem, JOhns Hopkins Med Sch, Baltimore, MD, 21205, USA penglund@jhmi.edu
SOURCE: Molecular & Biochemical Parasitology, (May 2004) Vol. 135, No. 1, pp. 149-152. print. CODEN: MBIPDP. ISSN: 0166-6851.

DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 10 Nov 2004
Last Updated on STN: 10 Nov 2004

L10 ANSWER 4 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Oral lactoferrin inhibits growth of established tumors and potentiates conventional chemotherapy.
AB In this work, we investigated the anticancer activity of orally administered recombinant human lactoferrin (rhLF) alone and in combination with chemotherapy in tumor-bearing mice. rhLF inhibited the growth of squamous cell carcinoma (O12) tumors in T cell-immunocompromised nu/nu mice by 80% when administered at 1,000 mg/kg (2.9 g/m2) by oral gavage twice daily for 8 days ($p < 0.001$). Similar activity was observed in syngeneic, immunocompetent BALB/c mice, where orally administered rhLF (1,000 mg/kg, 2.9 g/m2 once daily) halted the growth of mammary adenocarcinoma TUBO. Oral rhLF (200 mg/kg, 0.57 g/m2) was also used alone and in combination with cis-platinum (5 mg/kg) to treat head-and-neck squamous cell carcinoma in a syngeneic murine model. Monotherapy with oral rhLF or cis-platinum caused 61% or 66% tumor growth inhibition over placebo, respectively. Mice receiving both therapies showed 79% growth inhibition, a statistically significant improvement over each drug alone. We then demonstrated that administration of oral rhLF (300 mg/kg, 0.86 g/m2) to tumor-bearing or naive mice resulted in (i) significantly increased production of IL-18 in the intestinal tract, (ii) systemic NK cell activation and (iii) circulating CD8+ T-cell expansion. These data suggest that oral rhLF is an immunomodulatory agent active against cancer as a single agent and in combination chemotherapy, exerting its systemic effect through stimulation of IL-18 and other cytokines in the gut enterocytes. rhLF has been administered orally to 211 people without a single serious drug-related adverse event. Thus, rhLF shows promise as a safe and well-tolerated novel immunomodulatory anticancer agent.

ACCESSION NUMBER: 2004:412130 BIOSIS
DOCUMENT NUMBER: PREV200400415236
TITLE: Oral lactoferrin inhibits growth of established tumors and potentiates conventional chemotherapy.
AUTHOR(S): **Varadhachary, Atul** [Reprint Author]; Wolf, Jeffrey S.; Petrak, Karel; O'Malley, Bert W. Jr; Spadaro, Michela; Curcio, Claudia; Forni, Guido; Pericle, Federica
CORPORATE SOURCE: Agennix Inc, 8 Greenway Plaza Suite 910, Houston, TX, 77046, USA
avaradhachary@agennix.com
SOURCE: International Journal of Cancer, (September 1 2004) Vol. 111, No. 3, pp. 398-403. print.
CODEN: IJCNAW. ISSN: 0020-7136.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 27 Oct 2004
Last Updated on STN: 27 Oct 2004

L10 ANSWER 5 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Optimized conditions for stimulation of peripheral blood mononuclear cells (PBMC) by recombinant human lactoferrin (rhLF).
ACCESSION NUMBER: 2004:64639 BIOSIS
DOCUMENT NUMBER: PREV200400062688
TITLE: Optimized conditions for stimulation of peripheral blood mononuclear cells (PBMC) by recombinant human lactoferrin (rhLF).
AUTHOR(S): Martinson, Brent A. [Reprint Author]; Kim, Jenney S. [Reprint Author]; **Varadhachary, Atul**; Baum, Linda L. [Reprint Author]
CORPORATE SOURCE: Microbiology/Immunology, Finch University of Health

Sciences/Chicago Medical School, 3333 Green Bay Rd., North Chicago, IL, 60064, USA

SOURCE: FASEB Journal, (April 14 2003) Vol. 17, No. 7, pp. C58. print.
Meeting Info.: 90th Anniversary Annual Meeting of the American Association of Immunologists. Denver, CO, USA. May 06-10, 2003. American Association of Immunologists.
ISSN: 0892-6638 (ISSN print).

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 28 Jan 2004
Last Updated on STN: 28 Jan 2004

L10 ANSWER 6 OF 16 USPATFULL on STN

TI Use of lactoferrin in prophylaxis against infection and/or inflammation in immunosuppressed subjects

AB The present invention relates to a use of lactoferrin in prophylaxis against infection and/or inflammation in immunosuppressed subjects or subjects whose immune systems are expected to be suppressed. Specifically, the invention provides a method of preventing infection and/or inflammation in individuals by administrating an effective amount of pharmaceutical formulation comprised of a lactoferrin product.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:87812 USPATFULL

TITLE: Use of lactoferrin in prophylaxis against infection and/or inflammation in immunosuppressed subjects

INVENTOR(S): **Varadhachary, Atul**, Houston, TX, UNITED STATES
Barsky, Rick, Houston, TX, UNITED STATES
Yankee, Ernest, Houston, TX, UNITED STATES

PATENT ASSIGNEE(S): AGENNIX INCORPORATED (U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2005075277 | A1 | 20050407 | |
| APPLICATION INFO.: | US 2004-889539 | A1 | 20040712 | (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2003-486100P | 20030710 (60) |

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095

NUMBER OF CLAIMS: 19

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 1110

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 7 OF 16 USPATFULL on STN

TI Lactoferrin as an adjuvant in cancer vaccines

AB The present invention relates to methods of treating cancer by administering a composition of lactoferrin (LF) in combination with cancer vaccines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:22800 USPATFULL

TITLE: Lactoferrin as an adjuvant in cancer vaccines

INVENTOR(S): **Varadhachary, Atul**, Houston, TX, UNITED STATES

Pericle, Federica, Houston, TX, UNITED STATES
PATENT ASSIGNEE(S): AGENNIX INCORPORATED (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2005019342 | A1 | 20050127 |
| APPLICATION INFO.: | US 2004-862213 | A1 | 20040607 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2003-476318P | 20030606 (60) |
| | US 2003-498236P | 20030827 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1475
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 8 OF 16 USPATFULL on STN
TI Lactoferrin in the treatment of diabetes mellitus
AB The present invention relates to methods of using a composition of lactoferrin for the treatment of diabetes mellitus as manifested by a reduction in the levels of serum glucose, blood pressure, obesity, or glycosylated hemoglobin (HbAlc).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:4900 USPATFULL
TITLE: Lactoferrin in the treatment of diabetes mellitus
INVENTOR(S): Engelmayer, Jose, Houston, TX, UNITED STATES
**Varadhachary, Atul**, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2005004006 | A1 | 20050106 |
| APPLICATION INFO.: | US 2004-844865 | A1 | 20040513 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2003-470549P | 20030514 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI L.L.P., 600 CONGRESS AVE., SUITE 2400, AUSTIN, TX, 78701
NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 984
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 9 OF 16 USPATFULL on STN
TI Lactoferrin as an agent in the prevention of organ transplant rejection and graft-versus-host-disease
AB The present invention relates to methods of using lactoferrin (LF) to treat, prevent or reduce the incidence of organ transplant rejection and graft-versus-host-disease. More particularly, the present invention relates to methods of reducing an immune response against miss-matched transplanted organs such as kidney, heart, lung, liver, pancreas and stem cells by administering a composition of lactoferrin to the

recipient patients. In addition, this invention relates to the treatment of bone marrow transplant (BMT) donors with lactoferrin to attenuate the development of graft-versus-host-disease in the recipients. Moreover, this invention relates to the treatment of xenograft organ donors with lactoferrin to attenuate the development of graft rejection in the recipients.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2004:227890 USPATFULL | | | |
| TITLE: | Lactoferrin as an agent in the prevention of organ transplant rejection and graft-versus-host-disease | | | |
| INVENTOR(S): | **Varadhachary, Atul**, Houston, TX, UNITED STATES<br>Pericle, Federica, Houston, TX, UNITED STATES | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 2004176276 | A1 | 20040909 | |
| APPLICATION INFO.: | US 2003-732429 | A1 | 20031210 | (10) |
| | NUMBER | | DATE | |
| PRIORITY INFORMATION: | US 2002-432113P | | 20021210 | (60) |
| | US 2003-498338P | | 20030827 | (60) |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095 | | | |
| NUMBER OF CLAIMS: | 44 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| NUMBER OF DRAWINGS: | 3 Drawing Page(s) | | | |
| LINE COUNT: | 1286 | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 10 OF 16 USPATFULL on STN

TI Oral lactoferrin in the treatment of sepsis

AB The present invention relates to methods of treating prophylactically or therapeutically bacteremia, sepsis, septic shock or related conditions such as ARDS by administering orally a composition of lactoferrin alone or in combination with standard therapies or metal chelators to prevent or treat the consequences of bacterially induced systemic inflammatory response syndrome. In particular it is claimed that the therapeutic use of recombinant human lactoferrin alone or in combination with metal chelators or other therapeutic interventions decreases the mortality due to bacteremia, sepsis, septic shock or related conditions such as ARDS.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2004:197319 USPATFULL | | | |
| TITLE: | Oral lactoferrin in the treatment of sepsis | | | |
| INVENTOR(S): | **Varadhachary, Atul**, Houston, TX, UNITED STATES<br>Petrak, Karel, Houston, TX, UNITED STATES | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 2004152624 | A1 | 20040805 | |
| APPLICATION INFO.: | US 2003-728521 | A1 | 20031205 | (10) |
| | NUMBER | | DATE | |
| PRIORITY INFORMATION: | US 2002-431393P | | 20021206 | (60) |
| | US 2003-498327P | | 20030827 | (60) |
| DOCUMENT TYPE: | Utility | | | |

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1587
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 11 OF 16 USPATFULL on STN
TI . Lactoferrin in the reduction of circulating cholesterol, vascular inflammation, atherosclerosis and cardiovascular disease
AB The present invention relates to methods of using lactoferrin (LF) to reduce circulating levels of cholesterol and vascular inflammation, in order to treat, prevent or reduce the incidence of atherosclerosis and cardiovascular disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:197318 USPATFULL
TITLE: Lactoferrin in the reduction of circulating cholesterol, vascular inflammation, atherosclerosis and cardiovascular disease
INVENTOR(S): **Varadhachary, Atul**, Houston, TX, UNITED STATES
Glynn, Peter, Houston, TX, UNITED STATES
Wang, Yenyun, Houston, TX, UNITED STATES
Engelmayer, Jose, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2004152623 | A1 | 20040805 | |
| APPLICATION INFO.: | US 2003-728275 | A1 | 20031204 | (10) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 2002-430867P | 20021204 | (60) |
| | US 2003-498337P | 20030827 | (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 12 OF 16 USPATFULL on STN
TI Lactoferrin in the reduction of pain
AB The present invention relates to methods of using lactoferrin (LF) to reduce pain in conditions associated with severe or intractable pain by administering a composition of lactoferrin either alone or in combination with other therapy for pain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:196480 USPATFULL
TITLE: Lactoferrin in the reduction of pain
INVENTOR(S): **Varadhachary, Atul**, Houston, TX, UNITED STATES
Petrak, Karel, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|

PATENT INFORMATION: US 2004151784 A1 20040805
APPLICATION INFO.: US 2003-733621 A1 20031211 (10)

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-432937P | 20021212 (60) |
| | US 2003-498248P | 20030827 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1001
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 13 OF 16 USPATFULL on STN
TI Lactoferrin compositions and methods of wound treatment
AB The present invention relates to lactoferrin compositions and methods of using the compositions to treat wounds. The compositions can be administered alone or in combination with other standard wound healing therapies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:184154 USPATFULL
TITLE: Lactoferrin compositions and methods of wound treatment
INVENTOR(S): Engelmayer, Jose, Houston, TX, UNITED STATES
**Varadhachary, Atul**, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004142037 | A1 | 20040722 |
| APPLICATION INFO.: | US 2003-663258 | A1 | 20030916 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-410981P | 20020916 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 51
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 2061
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 14 OF 16 USPATFULL on STN
TI Intratumorally administered lactoferrin in the treatment of malignant neoplasms and other hyperproliferative diseases
AB The present invention relates to methods of treating a hyperproliferative disease by administering a composition of lactoferrin alone or in combination with standard anti-cancer therapies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:108102 USPATFULL
TITLE: Intratumorally administered lactoferrin in the treatment of malignant neoplasms and other hyperproliferative diseases
INVENTOR(S): **Varadhachary, Atul**, Houston, TX, UNITED STATES

Barsky, Rick, Houston, TX, UNITED STATES
Petrak, Karel, Houston, TX, UNITED STATES
O'Malley, Bert, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004082504 | A1 | 20040429 |
| APPLICATION INFO.: | US 2003-435319 | A1 | 20030509 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-379442P | 20020510 (60) |
| | US 2002-379441P | 20020510 (60) |
| | US 2002-379474P | 20020510 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1447
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 15 OF 16 USPATFULL on STN
TI Oral lactoferrin in the treatment of respiratory disorders
AB The present invention relates to methods of treating an allergic or non-allergic respiratory disorder by administering orally a composition of lactoferrin alone or in combination with metal chelators to treat respiratory disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:13374 USPATFULL
TITLE: Oral lactoferrin in the treatment of respiratory disorders
INVENTOR(S): Glynn, Peter, Houston, TX, UNITED STATES
**Varadhachary, Atul**, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004009896 | A1 | 20040115 |
| APPLICATION INFO.: | US 2003-441329 | A1 | 20030520 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-383280P | 20020524 (60) |
| | US 2002-410645P | 20020913 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 84
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 1476
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L10 ANSWER 16 OF 16 USPATFULL on STN
TI Lactoferrin in the treatment of malignant neoplasms and other hyperproliferative diseases
AB The present invention relates to methods of treating a hyperproliferative disease by administering a composition of lactoferrin

alone or in combination with standard anti-cancer therapies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | |
|---|---|
| ACCESSION NUMBER: | 2004:13373 USPATFULL |
| TITLE: | Lactoferrin in the treatment of malignant neoplasms and other hyperproliferative diseases |
| INVENTOR(S): | **Varadhachary, Atul**, Houston, TX, UNITED STATES<br>Barsky, Rick, Houston, TX, UNITED STATES<br>Pericle, Federica, Houston, TX, UNITED STATES<br>Petrak, Karel, Houston, TX, UNITED STATES<br>Wang, Yenyun, Houston, TX, UNITED STATES |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2004009895 | A1 | 20040115 | |
| APPLICATION INFO.: | US 2003-434769 | A1 | 20030509 | (10) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 2002-379442P | 20020510 | (60) |
| | US 2002-379441P | 20020510 | (60) |
| | US 2002-379474P | 20020510 | (60) |

| | |
|---|---|
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095 |
| NUMBER OF CLAIMS: | 99 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 5 Drawing Page(s) |
| LINE COUNT: | 1683 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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| NEWS | 3 | FEB 28 | PATDPAFULL - New display fields provide for legal status data from INPADOC |
| NEWS | 4 | FEB 28 | BABS - Current-awareness alerts (SDIs) available |
| NEWS | 5 | MAR 02 | GBFULL: New full-text patent database on STN |
| NEWS | 6 | MAR 03 | REGISTRY/ZREGISTRY - Sequence annotations enhanced |
| NEWS | 7 | MAR 03 | MEDLINE file segment of TOXCENTER reloaded |
| NEWS | 8 | MAR 22 | KOREAPAT now updated monthly; patent information enhanced |
| NEWS | 9 | MAR 22 | Original IDE display format returns to REGISTRY/ZREGISTRY |
| NEWS | 10 | MAR 22 | PATDPASPC - New patent database available |
| NEWS | 11 | MAR 22 | REGISTRY/ZREGISTRY enhanced with experimental property tags |
| NEWS | 12 | APR 04 | EPFULL enhanced with additional patent information and new fields |
| NEWS | 13 | APR 04 | EMBASE - Database reloaded and enhanced |
| NEWS | 14 | APR 18 | New CAS Information Use Policies available online |
| NEWS | 15 | APR 25 | Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAplus and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications. |
| NEWS | 16 | APR 28 | Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAplus |
| NEWS | 17 | MAY 23 | GBFULL enhanced with patent drawing images |
| NEWS | 18 | MAY 23 | REGISTRY has been enhanced with source information from CHEMCATS |
| NEWS | 19 | JUN 06 | The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available |
| NEWS | 20 | JUN 13 | RUSSIAPAT: New full-text patent database on STN |
| NEWS | 21 | JUN 13 | FRFULL enhanced with patent drawing images |
| NEWS | 22 | JUN 27 | MARPAT displays enhanced with expanded G-group definitions and text labels |
| NEWS | 23 | JUL 01 | MEDICONF removed from STN |
| NEWS | 24 | JUL 07 | STN Patent Forums to be held in July 2005 |
| NEWS | 25 | JUL 13 | SCISEARCH reloaded |
| NEWS | 26 | JUL 20 | Powerful new interactive analysis and visualization software, STN AnaVist, now available |
| NEWS | 27 | AUG 11 | Derwent World Patents Index(R) web-based training during August |
| NEWS | 28 | AUG 11 | STN AnaVist workshops to be held in North America |
| NEWS | 29 | AUG 30 | CA/CAplus -Increased access to 19th century research documents |
| NEWS | 30 | AUG 30 | CASREACT - Enhanced with displayable reaction conditions |

NEWS EXPRESS JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005

NEWS HOURS STN Operating Hours Plus Help Desk Availability

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 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

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FILE 'HOME' ENTERED AT 10:33:34 ON 01 SEP 2005

=> file medline, uspatful, dgene, embase, wpids, biosis, biotechds
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'MEDLINE' ENTERED AT 10:33:53 ON 01 SEP 2005

FILE 'USPATFULL' ENTERED AT 10:33:53 ON 01 SEP 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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=> s lactoferrin and cardiovascular disease
   5 FILES SEARCHED...
L1          123 LACTOFERRIN AND CARDIOVASCULAR DISEASE

=> s l1 and (administer for atherosclerosis)
L2            0 L1 AND (ADMINISTER FOR ATHEROSCLEROSIS)

=> s l1 and (vascular inflammation)
L3            5 L1 AND (VASCULAR INFLAMMATION)

=> s l1 and (atherosclerosis)
L4           84 L1 AND (ATHEROSCLEROSIS)

=> s l4 and antacid
L5            1 L4 AND ANTACID

=> d l5 ti abs ibib tot

L5   ANSWER 1 OF 1  USPATFULL on STN
TI     Lactoferrin in the reduction of circulating cholesterol,
```

vascular inflammation, **atherosclerosis** and **cardiovascular disease**

AB The present invention relates to methods of using **lactoferrin** (LF) to reduce circulating levels of cholesterol and vascular inflammation, in order to treat, prevent or reduce the incidence of **atherosclerosis** and **cardiovascular disease**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:197318 USPATFULL

TITLE: **Lactoferrin** in the reduction of circulating cholesterol, vascular inflammation, **atherosclerosis** and **cardiovascular disease**

INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Glynn, Peter, Houston, TX, UNITED STATES
Wang, Yenyun, Houston, TX, UNITED STATES
Engelmayer, Jose, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004152623 | A1 | 20040805 |
| APPLICATION INFO.: | US 2003-728275 | A1 | 20031204 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-430867P | 20021204 (60) |
| | US 2003-498337P | 20030827 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 10:33:34 ON 01 SEP 2005)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, BIOSIS, BIOTECHDS' ENTERED AT 10:33:53 ON 01 SEP 2005

L1 123 S LACTOFERRIN AND CARDIOVASCULAR DISEASE
L2 0 S L1 AND (ADMINISTER FOR ATHEROSCLEROSIS)
L3 5 S L1 AND (VASCULAR INFLAMMATION)
L4 84 S L1 AND (ATHEROSCLEROSIS)
L5 1 S L4 AND ANTACID

=> s l3 and antacid
L6 1 L3 AND ANTACID

=> d l6 ti abs ibib tot

L6 ANSWER 1 OF 1 USPATFULL on STN

TI **Lactoferrin** in the reduction of circulating cholesterol, **vascular inflammation**, atherosclerosis and **cardiovascular disease**

AB The present invention relates to methods of using **lactoferrin** (LF) to reduce circulating levels of cholesterol and **vascular inflammation**, in order to treat, prevent or reduce the incidence of atherosclerosis and **cardiovascular disease**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:197318 USPATFULL
TITLE: **Lactoferrin** in the reduction of circulating cholesterol, **vascular inflammation**, atherosclerosis and **cardiovascular disease**
INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Glynn, Peter, Houston, TX, UNITED STATES
Wang, Yenyun, Houston, TX, UNITED STATES
Engelmayer, Jose, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2004152623 | A1 | 20040805 | |
| APPLICATION INFO.: | US 2003-728275 | A1 | 20031204 | (10) |

| | NUMBER | DATE | |
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| PRIORITY INFORMATION: | US 2002-430867P | 20021204 | (60) |
| | US 2003-498337P | 20030827 | (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, BIOSIS, BIOTECHDS' ENTERED AT 10:33:53 ON 01 SEP 2005

L1 123 S LACTOFERRIN AND CARDIOVASCULAR DISEASE
L2 0 S L1 AND (ADMINISTER FOR ATHEROSCLEROSIS)
L3 5 S L1 AND (VASCULAR INFLAMMATION)
L4 84 S L1 AND (ATHEROSCLEROSIS)
L5 1 S L4 AND ANTACID
L6 1 S L3 AND ANTACID

=> d l5 ti abs ibib tot

L5 ANSWER 1 OF 1 USPATFULL on STN
TI **Lactoferrin** in the reduction of circulating cholesterol, vascular inflammation, **atherosclerosis** and **cardiovascular disease**
AB The present invention relates to methods of using **lactoferrin** (LF) to reduce circulating levels of cholesterol and vascular inflammation, in order to treat, prevent or reduce the incidence of **atherosclerosis** and **cardiovascular disease**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:197318 USPATFULL
TITLE: **Lactoferrin** in the reduction of circulating cholesterol, vascular inflammation, **atherosclerosis** and **cardiovascular disease**
INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES

Glynn, Peter, Houston, TX, UNITED STATES
Wang, Yenyun, Houston, TX, UNITED STATES
Engelmayer, Jose, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004152623 | A1 | 20040805 |
| APPLICATION INFO.: | US 2003-728275 | A1 | 20031204 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-430867P | 20021204 (60) |
| | US 2003-498337P | 20030827 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 10:33:34 ON 01 SEP 2005)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, BIOSIS, BIOTECHDS'
ENTERED AT 10:33:53 ON 01 SEP 2005
L1 123 S LACTOFERRIN AND CARDIOVASCULAR DISEASE
L2 0 S L1 AND (ADMINISTER FOR ATHEROSCLEROSIS)
L3 5 S L1 AND (VASCULAR INFLAMMATION)
L4 84 S L1 AND (ATHEROSCLEROSIS)
L5 1 S L4 AND ANTACID
L6 1 S L3 AND ANTACID

=> d l3 ti abs ibib tot

L3 ANSWER 1 OF 5 USPATFULL on STN
TI Methods of treating an inflammatory-related disease
AB The invention relates to pharmaceutical compositions and methods of treating inflammatory-related diseases associated with pro-inflammatory cytokine expression and/or reduced expression of anti-inflammatory cytokines. The method typically comprises administration of one or more compounds selected from isoindigo, indigo, indirubin, or derivatives thereof, such as, Meisoindigo and NATURA. Preferably the pharmaceutical composition comprises one or more compounds selected from isoindigo, indigo, indirubin, or derivatives thereof, an anti-inflammatory agent, and a pharmaceutically acceptable carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:177965 USPATFULL
TITLE: Methods of treating an inflammatory-related disease
INVENTOR(S): Wang, Longgui, Flushing, NY, UNITED STATES
Liu, Xiao Mei, Flushing, NY, UNITED STATES
Mo, Lian, Palo Alto, CA, UNITED STATES
Mencher, Simon K., New York, NY, UNITED STATES
McCarron, James P. JR., New York, NY, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2005154046 | A1 | 20050714 |

APPLICATION INFO.: US 2004-754547 A1 20040112 (10)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WINSTON & STRAWN LLP, 1700 K STREET, N.W., WASHINGTON, DC, 20006, US
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 2680
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 2 OF 5 USPATFULL on STN
TI **Lactoferrin** in the reduction of circulating cholesterol, **vascular inflammation**, atherosclerosis and **cardiovascular disease**
AB The present invention relates to methods of using **lactoferrin** (LF) to reduce circulating levels of cholesterol and **vascular inflammation**, in order to treat, prevent or reduce the incidence of atherosclerosis and **cardiovascular disease**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:197318 USPATFULL
TITLE: **Lactoferrin** in the reduction of circulating cholesterol, **vascular inflammation**, atherosclerosis and **cardiovascular disease**
INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Glynn, Peter, Houston, TX, UNITED STATES
Wang, Yenyun, Houston, TX, UNITED STATES
Engelmayer, Jose, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004152623 | A1 | 20040805 |
| APPLICATION INFO.: | US 2003-728275 | A1 | 20031204 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-430867P | 20021204 (60) |
| | US 2003-498337P | 20030827 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 3 OF 5 USPATFULL on STN
TI Immune modulation method using steroid compounds
AB The invention provides compositions comprising formula 1 steroids, e.g., 16α-bromo-3 β-hydroxy-5α-androstan-17-one hemihydrate and one or more excipients, including compositions that comprise a liquid formulation comprising less than about 3% v/v water. The compositions are useful to make improved pharmaceutical formulations. The invention also provides methods of intermittent dosing of steroid compounds such as analogs of 16α-bromo-3β-hydroxy-5α-androstan-17-one and compositions useful in such dosing regimens. The invention further provides compositions and methods to inhibit pathogen replication, ameliorate symptoms associated with immune dysregulation and to modulate immune responses in a subject using the compounds. The

invention also provides methods to make and use these immunomodulatory compositions and formulations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:86817 USPATFULL

TITLE: Immune modulation method using steroid compounds

INVENTOR(S): Ahlem, Clarence N., San Diego, CA, UNITED STATES
Frincke, James M., San Diego, CA, UNITED STATES
dos Anjos de Carvalho, Luis Daniel, Paio Pires, PORTUGAL
Heggie, William, Palmela, PORTUGAL
Prendergast, Patrick T., County Kildare, IRELAND
Reading, Christopher L., San Diego, CA, UNITED STATES
Thadikonda, Krupakar Paul, Gaithersburg, MD, UNITED STATES
Vernon, Russell N., Oak Hills, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2003060425 | A1 | 20030327 |
| APPLICATION INFO.: | US 2001-820483 | A1 | 20010329 (9) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-449184, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-414905, filed on 8 Oct 1999, ABANDONED Continuation-in-part of Ser. No. US 1999-449004, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-535675, filed on 23 Mar 2000, PENDING Continuation-in-part of Ser. No. US 1999-449042, filed on 24 Nov 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-675470, filed on 28 Sep 2000, PENDING Continuation-in-part of Ser. No. US 2000-586673, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-586672, filed on 1 Jun 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-461026, filed on 15 Dec 1999, ABANDONED

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 1998-109924P | 19981124 (60) |
| | US 1999-140028P | 19990616 (60) |
| | US 1998-109923P | 19981124 (60) |
| | US 1999-126056P | 19991019 (60) |
| | US 1999-124087P | 19990311 (60) |
| | US 1998-110127P | 19981127 (60) |
| | US 1999-161453P | 19991025 (60) |
| | US 1999-145823P | 19990727 (60) |
| | US 1999-137745P | 19990603 (60) |
| | US 1998-112206P | 19981215 (60) |
| | US 2000-257071P | 20001220 (60) |

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HOLLIS-EDEN PHARMACEUTICALS, INC., 4435 EASTGATE MALL, SUITE 400, SAN DIEGO, CA, 92121

NUMBER OF CLAIMS: 54

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 6 Drawing Page(s)

LINE COUNT: 14708

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 4 OF 5 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Treating a **cardiovascular disease** comprises administering to a subject an effective amount of a **lactoferrin** composition to provide an improvement in the **cardiovascular**

**disease** in the subject.

AN 2004-460986 [43] WPIDS

AB WO2004050037 A UPAB: 20040709

NOVELTY - Treating a **cardiovascular disease** comprises administering to a subject an effective amount of a **lactoferrin** composition to provide an improvement in the **cardiovascular disease** in the subject.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of modulating atherosclerosis in a subject comprising administering to the subject an effective amount of a **lactoferrin** composition to modulate atherosclerosis in the subject.

ACTIVITY - Cardiant; Antiarteriosclerotic. No biological data given.

MECHANISM OF ACTION - Gene therapy; HMG-coA reductase inhibitor.

USE - The method is useful for treating a **cardiovascular disease**, e.g. atherosclerosis (claimed).

Dwg.0/5

ACCESSION NUMBER: 2004-460986 [43] WPIDS

DOC. NO. CPI: C2004-172138

TITLE: Treating a **cardiovascular disease** comprises administering to a subject an effective amount of a **lactoferrin** composition to provide an improvement in the **cardiovascular disease** in the subject.

DERWENT CLASS: B04 D16

INVENTOR(S): ENGELMAYER, J; GLYNN, P; VARADHACHARY, A; WANG, Y

PATENT ASSIGNEE(S): (ENGE-I) ENGELMAYER J; (GLYN-I) GLYNN P; (VARA-I) VARADHACHARY A; (WANG-I) WANG Y; (AGEN-N) AGENNIX INC

COUNTRY COUNT: 107

PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---|---|---|---|---|---|
| WO 2004050037 | A2 | 20040617 | (200443)* | EN | 38 |
| RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW | | | | | |
| W: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW | | | | | |
| US 2004152623 | A1 | 20040805 | (200452) | | |
| AU 2003291206 | A1 | 20040623 | (200472) | | |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---|---|---|---|
| WO 2004050037 | A2 | WO 2003-US38540 | 20031204 |
| US 2004152623 | A1 Provisional | US 2002-430867P | 20021204 |
| | Provisional | US 2003-498337P | 20030827 |
| | | US 2003-728275 | 20031204 |
| AU 2003291206 | A1 | AU 2003-291206 | 20031204 |

FILING DETAILS:

| PATENT NO | KIND | PATENT NO |
|---|---|---|
| AU 2003291206 | A1 Based on | WO 2004050037 |

PRIORITY APPLN. INFO: US 2003-498337P 20030827; US 2002-430867P 20021204; US 2003-728275 20031204

L3 ANSWER 5 OF 5 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
TI Treating a **cardiovascular disease** comprises administering to a subject an effective amount of a **lactoferrin** composition to provide an improvement in the **cardiovascular disease** in the subject;
involving vector-mediated gene transfer and expression in host cell for use in gene therapy
AN 2004-16843 BIOTECHDS
AB DERWENT ABSTRACT:
NOVELTY - Treating a **cardiovascular disease** comprises administering to a subject an effective amount of a **lactoferrin** composition to provide an improvement in the **cardiovascular disease** in the subject.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of modulating atherosclerosis in a subject comprising administering to the subject an effective amount of a **lactoferrin** composition to modulate atherosclerosis in the subject.

BIOTECHNOLOGY - Preferred Method: In treating a **cardiovascular disease**, the **cardiovascular disease** is atherosclerosis. The **lactoferrin** composition reduces levels of circulating total cholesterol, low-density lipoproteins (LDL), very low-density lipoproteins (VLDL), or triglycerides in the subject. The **lactoferrin** composition increases the levels of circulating high-density lipoproteins (HDL) in the subject. The **lactoferrin** composition reduces the levels of **vascular inflammation**, circulating C-reactive protein (CRP), proliferation of vascular smooth muscle cells, vascular spasm or vascular hyper-reactivity in the subject. The **lactoferrin** composition promotes endothelial integrity or healing in the subject. The **lactoferrin** composition is dispersed in a carrier. The **lactoferrin** is mammalian **lactoferrin**. The **lactoferrin** is human or bovine. The **lactoferrin** is recombinant **lactoferrin**. The **lactoferrin** composition comprises an N-terminal **lactoferrin** variant. The N-terminal **lactoferrin** variant lacks at least the N-terminal glycine residue. The N-terminal **lactoferrin** variant comprises at least 1% to at least 50% of the **lactoferrin** composition. The **lactoferrin** composition reduces the production or activity of pro-inflammatory cytokines. The method further comprises administering a **lactoferrin** composition in combination with an anti-cholesterol agent or an anti-inflammatory agent. The anti-cholesterol agent is selected from cholesterol absorption inhibitors, bile acid sequestrants, nicotinic acid, fibric acids and HMG-coA reductase inhibitors. The bile acid sequestrants are selected from cholestyramine, colestipol and colesevalam. The fibric acids are selected from gemfibrozil, fenofibrate and clofibrate. The HMG-coA reductase inhibitors are selected from lovastatin, pravastatin, simvastatin, fluvastatin, atorvastatin and cerivastatin. In modulating atherosclerosis in a subject, the modulating is reducing the incidence or severity of atherosclerosis in the subject.

ACTIVITY - Cardiant; Antiarteriosclerotic. No biological data given.

MECHANISM OF ACTION - Gene therapy; HMG-coA reductase inhibitor.

USE - The method is useful for treating a **cardiovascular disease**, e.g. atherosclerosis (claimed).

ADMINISTRATION - Dosage is 1 ng-20 g per day or 0.1-5 g per day. The **lactoferrin** composition is administered parenterally, e.g. subcutaneously, intramuscularly, intraperitoneally, intravenously, intraarterially, intramyocardially, transendocardially, transepicardially, or intrathecally, or orally (all claimed). (38 pages)

ACCESSION NUMBER: 2004-16843 BIOTECHDS
TITLE: Treating a **cardiovascular disease** comprises administering to a subject an effective amount of a **lactoferrin** composition to provide an improvement in the **cardiovascular disease** in the subject

;
involving vector-mediated gene transfer and expression in host cell for use in gene therapy
AUTHOR: VARADHACHARY A; GLYNN P; WANG Y; ENGELMAYER J
PATENT ASSIGNEE: AGENNIX INC; VARADHACHARY A
PATENT INFO: WO 2004050037 17 Jun 2004
APPLICATION INFO: WO 2003-US38540 4 Dec 2003
PRIORITY INFO: US 2003-498337 27 Aug 2003; US 2002-430867 4 Dec 2002
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2004-460986 [43]

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(FILE 'HOME' ENTERED AT 10:33:34 ON 01 SEP 2005)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, BIOSIS, BIOTECHDS'
ENTERED AT 10:33:53 ON 01 SEP 2005
L1 123 S LACTOFERRIN AND CARDIOVASCULAR DISEASE
L2 0 S L1 AND (ADMINISTER FOR ATHEROSCLEROSIS)
L3 5 S L1 AND (VASCULAR INFLAMMATION)
L4 84 S L1 AND (ATHEROSCLEROSIS)
L5 1 S L4 AND ANTACID
L6 1 S L3 AND ANTACID

=> s l3 and l4
L7 5 L3 AND L4

=> s lactoferrin and antacid
L8 32 LACTOFERRIN AND ANTACID

=> s l8 and cardiovascular disease
5 FILES SEARCHED...
L9 1 L8 AND CARDIOVASCULAR DISEASE

=> d l9 ti abs ibib tot

L9 ANSWER 1 OF 1 USPATFULL on STN
TI **Lactoferrin** in the reduction of circulating cholesterol, vascular inflammation, atherosclerosis and **cardiovascular disease**
AB The present invention relates to methods of using **lactoferrin** (LF) to reduce circulating levels of cholesterol and vascular inflammation, in order to treat, prevent or reduce the incidence of atherosclerosis and **cardiovascular disease**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:197318 USPATFULL
TITLE: **Lactoferrin** in the reduction of circulating cholesterol, vascular inflammation, atherosclerosis and **cardiovascular disease**
INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Glynn, Peter, Houston, TX, UNITED STATES
Wang, Yenyun, Houston, TX, UNITED STATES
Engelmayer, Jose, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2004152623 | A1 | 20040805 | |
| APPLICATION INFO.: | US 2003-728275 | A1 | 20031204 | (10) |

NUMBER DATE

| | | |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-430867P | 20021204 (60) |
| | US 2003-498337P | 20030827 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095 | |
| NUMBER OF CLAIMS: | 34 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 5 Drawing Page(s) | |
| LINE COUNT: | 1264 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 10:33:34 ON 01 SEP 2005)

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, BIOSIS, BIOTECHDS'
ENTERED AT 10:33:53 ON 01 SEP 2005

| | | | |
|---|---|---|---|
| L1 | 123 | S | LACTOFERRIN AND CARDIOVASCULAR DISEASE |
| L2 | 0 | S | L1 AND (ADMINISTER FOR ATHEROSCLEROSIS) |
| L3 | 5 | S | L1 AND (VASCULAR INFLAMMATION) |
| L4 | 84 | S | L1 AND (ATHEROSCLEROSIS) |
| L5 | 1 | S | L4 AND ANTACID |
| L6 | 1 | S | L3 AND ANTACID |
| L7 | 5 | S | L3 AND L4 |
| L8 | 32 | S | LACTOFERRIN AND ANTACID |
| L9 | 1 | S | L8 AND CARDIOVASCULAR DISEASE |

=> s l8 and l7
L10 1 L8 AND L7

=> d l10 ti abs ibib tot

L10 ANSWER 1 OF 1 USPATFULL on STN

TI **Lactoferrin** in the reduction of circulating cholesterol, **vascular inflammation**, **atherosclerosis** and **cardiovascular disease**

AB The present invention relates to methods of using **lactoferrin** (LF) to reduce circulating levels of cholesterol and **vascular inflammation**, in order to treat, prevent or reduce the incidence of **atherosclerosis** and **cardiovascular disease**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | | |
|---|---|---|
| ACCESSION NUMBER: | 2004:197318 USPATFULL | |
| TITLE: | **Lactoferrin** in the reduction of circulating cholesterol, **vascular inflammation**, **atherosclerosis** and **cardiovascular disease** | |
| INVENTOR(S): | Varadhachary, Atul, Houston, TX, UNITED STATES<br>Glynn, Peter, Houston, TX, UNITED STATES<br>Wang, Yenyun, Houston, TX, UNITED STATES<br>Engelmayer, Jose, Houston, TX, UNITED STATES | |

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2004152623 | A1 | 20040805 | |
| APPLICATION INFO.: | US 2003-728275 | A1 | 20031204 | (10) |

| | NUMBER | DATE |
|---|---|---|

PRIORITY INFORMATION: US 2002-430867P 20021204 (60)
US 2003-498337P 20030827 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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 NEWS  15 APR 25  Patent searching, including current-awareness alerts (SDIs),
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                  applications.
 NEWS  16 APR 28  Improved searching of U.S. Patent Classifications for
                  U.S. patent records in CA/CAplus
 NEWS  17 MAY 23  GBFULL enhanced with patent drawing images
 NEWS  18 MAY 23  REGISTRY has been enhanced with source information from
                  CHEMCATS
 NEWS  19 JUN 06  The Analysis Edition of STN Express with Discover!
                  (Version 8.0 for Windows) now available
 NEWS  20 JUN 13  RUSSIAPAT: New full-text patent database on STN
 NEWS  21 JUN 13  FRFULL enhanced with patent drawing images
 NEWS  22 JUN 27  MARPAT displays enhanced with expanded G-group definitions
                  and text labels
 NEWS  23 JUL 01  MEDICONF removed from STN
 NEWS  24 JUL 07  STN Patent Forums to be held in July 2005
 NEWS  25 JUL 13  SCISEARCH reloaded
 NEWS  26 JUL 20  Powerful new interactive analysis and visualization software,
                  STN AnaVist, now available
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                  August
 NEWS  28 AUG 11  STN AnaVist workshops to be held in North America

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=> file medline, uspatful, dgene
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=> s lactoferrin and antacid
L1          23 LACTOFERRIN AND ANTACID

=> d l1 ti abs ibib tot

L1   ANSWER 1 OF 23  USPATFULL on STN
TI     Lactoferrin as an adjuvant in cancer vaccines
AB     The present invention relates to methods of treating cancer by
       administering a composition of lactoferrin (LF) in combination
       with cancer vaccines.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER:         2005:22800  USPATFULL
TITLE:                    Lactoferrin as an adjuvant in cancer vaccines
INVENTOR(S):              Varadhachary, Atul, Houston, TX, UNITED STATES
                          Pericle, Federica, Houston, TX, UNITED STATES
PATENT ASSIGNEE(S):       AGENNIX INCORPORATED (U.S. corporation)

                               NUMBER         KIND    DATE
                          ---------------- ------ --------
PATENT INFORMATION:       US 2005019342      A1   20050127
APPLICATION INFO.:        US 2004-862213     A1   20040607  (10)

                               NUMBER         DATE
                          ---------------- --------
PRIORITY INFORMATION:     US 2003-476318P    20030606 (60)
                          US 2003-498236P    20030827 (60)
DOCUMENT TYPE:            Utility
FILE SEGMENT:             APPLICATION
LEGAL REPRESENTATIVE:     FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100,
                          HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS:         31
EXEMPLARY CLAIM:          1
NUMBER OF DRAWINGS:       5 Drawing Page(s)
```

LINE COUNT: 1475
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 2 OF 23 USPATFULL on STN
TI **Lactoferrin** in the treatment of diabetes mellitus
AB The present invention relates to methods of using a composition of **lactoferrin** for the treatment of diabetes mellitus as manifested by a reduction in the levels of serum glucose, blood pressure, obesity, or glycosylated hemoglobin (HbAlc).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2005:4900 USPATFULL
TITLE: **Lactoferrin** in the treatment of diabetes mellitus
INVENTOR(S): Engelmayer, Jose, Houston, TX, UNITED STATES
Varadhachary, Atul, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2005004006 | A1 | 20050106 | |
| APPLICATION INFO.: | US 2004-844865 | A1 | 20040513 | (10) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 2003-470549P | 20030514 | (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI L.L.P., 600 CONGRESS AVE., SUITE 2400, AUSTIN, TX, 78701
NUMBER OF CLAIMS: 41
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 984
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 3 OF 23 USPATFULL on STN
TI **Lactoferrin** as an agent in the prevention of organ transplant rejection and graft-versus-host-disease
AB The present invention relates to methods of using **lactoferrin** (LF) to treat, prevent or reduce the incidence of organ transplant rejection and graft-versus-host-disease. More particularly, the present invention relates to methods of reducing an immune response against miss-matched transplanted organs such as kidney, heart, lung, liver, pancreas and stem cells by administering a composition of **lactoferrin** to the recipient patients. In addition, this invention relates to the treatment of bone marrow transplant (BMT) donors with **lactoferrin** to attenuate the development of graft-versus-host-disease in the recipients. Moreover, this invention relates to the treatment of xenograft organ donors with **lactoferrin** to attenuate the development of graft rejection in the recipients.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:227890 USPATFULL
TITLE: **Lactoferrin** as an agent in the prevention of organ transplant rejection and graft-versus-host-disease
INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Pericle, Federica, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004176276 | A1 | 20040909 |

APPLICATION INFO.: US 2003-732429 A1 20031210 (10)

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-432113P | 20021210 (60) |
| | US 2003-498338P | 20030827 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 1286
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 4 OF 23 USPATFULL on STN
TI Oral **lactoferrin** in the treatment of sepsis
AB The present invention relates to methods of treating prophylactically or therapeutically bacteremia, sepsis, septic shock or related conditions such as ARDS by administering orally a composition of **lactoferrin** alone or in combination with standard therapies or metal chelators to prevent or treat the consequences of bacterially induced systemic inflammatory response syndrome. In particular it is claimed that the therapeutic use of recombinant human **lactoferrin** alone or in combination with metal chelators or other therapeutic interventions decreases the mortality due to bacteremia, sepsis, septic shock or related conditions such as ARDS.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:197319 USPATFULL
TITLE: Oral **lactoferrin** in the treatment of sepsis
INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Petrak, Karel, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2004152624 | A1 | 20040805 |
| APPLICATION INFO.: | US 2003-728521 | A1 | 20031205 (10) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-431393P | 20021206 (60) |
| | US 2003-498327P | 20030827 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 44
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1587
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 5 OF 23 USPATFULL on STN
TI **Lactoferrin** in the reduction of circulating cholesterol, vascular inflammation, atherosclerosis and cardiovascular disease
AB The present invention relates to methods of using **lactoferrin** (LF) to reduce circulating levels of cholesterol and vascular inflammation, in order to treat, prevent or reduce the incidence of atherosclerosis and cardiovascular disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:197318 USPATFULL
TITLE: **Lactoferrin** in the reduction of circulating cholesterol, vascular inflammation, atherosclerosis and cardiovascular disease
INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Glynn, Peter, Houston, TX, UNITED STATES
Wang, Yenyun, Houston, TX, UNITED STATES
Engelmayer, Jose, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2004152623 | A1 | 20040805 | |
| APPLICATION INFO.: | US 2003-728275 | A1 | 20031204 | (10) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 2002-430867P | 20021204 | (60) |
| | US 2003-498337P | 20030827 | (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 1264
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 6 OF 23 USPATFULL on STN
TI **Lactoferrin** in the reduction of pain
AB The present invention relates to methods of using **lactoferrin** (LF) to reduce pain in conditions associated with severe or intractable pain by administering a composition of **lactoferrin** either alone or in combination with other therapy for pain.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:196480 USPATFULL
TITLE: **Lactoferrin** in the reduction of pain
INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Petrak, Karel, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2004151784 | A1 | 20040805 | |
| APPLICATION INFO.: | US 2003-733621 | A1 | 20031211 | (10) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 2002-432937P | 20021212 | (60) |
| | US 2003-498248P | 20030827 | (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 1001
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 7 OF 23 USPATFULL on STN
TI **Lactoferrin** compositions and methods of wound treatment
AB The present invention relates to **lactoferrin** compositions and

methods of using the compositions to treat wounds. The compositions can be administered alone or in combination with other standard wound healing therapies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2004:184154 USPATFULL | | | |
| TITLE: | **Lactoferrin** compositions and methods of wound treatment | | | |
| INVENTOR(S): | Engelmayer, Jose, Houston, TX, UNITED STATES<br>Varadhachary, Atul, Houston, TX, UNITED STATES | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 2004142037 | A1 | 20040722 | |
| APPLICATION INFO.: | US 2003-663258 | A1 | 20030916 | (10) |
| | NUMBER | | DATE | |
| PRIORITY INFORMATION: | US 2002-410981P | | 20020916 (60) | |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095 | | | |
| NUMBER OF CLAIMS: | 51 | | | |
| EXEMPLARY CLAIM: | 1 | | | |
| NUMBER OF DRAWINGS: | 7 Drawing Page(s) | | | |
| LINE COUNT: | 2061 | | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 8 OF 23 USPATFULL on STN

TI Oral solid dose vaccine

AB The present invention relates to novel vaccine formulations suitable for oral administration. The vaccine formulations are in a solid form comprising antigen and suitable excipients, which after insertion into the mouth, rapidly dissolve in saliva, thereby releasing the vaccine into the mouth. Specifically, the solid form may consist of a cake of vaccine which is formed from a liquid solution or suspension by sublimation, preferably sublimation by lyophilisation. Preferred vaccines are those containing antigens which are or are derived from pathogens that normally infect or invade the host through a mucosal membrane, or those vaccines that further comprise an **antacid**. Particularly preferred vaccines are combination vaccines that comprise more than one antigen, and more preferably when the antigens are from more than one pathogen.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | | | | |
|---|---|---|---|---|
| ACCESSION NUMBER: | 2004:18393 USPATFULL | | | |
| TITLE: | Oral solid dose vaccine | | | |
| INVENTOR(S): | Vande-Velde, Vincent, Rixensart, BELGIUM | | | |
| | NUMBER | KIND | DATE | |
| PATENT INFORMATION: | US 2004013695 | A1 | 20040122 | |
| APPLICATION INFO.: | US 2003-344798 | A1 | 20030804 | (10) |
| | WO 2001-IB1711 | | 20010814 | |
| | NUMBER | | DATE | |
| PRIORITY INFORMATION: | GB 2000-2008991 | | 20000815 | |
| DOCUMENT TYPE: | Utility | | | |
| FILE SEGMENT: | APPLICATION | | | |
| LEGAL REPRESENTATIVE: | SMITHKLINE BEECHAM CORPORATION, CORPORATE INTELLECTUAL PROPERTY-US, UW2220, P. O. BOX 1539, KING OF PRUSSIA, | | | |

PA, 19406-0939
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 1045
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 9 OF 23 USPATFULL on STN
TI Oral **lactoferrin** in the treatment of respiratory disorders
AB The present invention relates to methods of treating an allergic or non-allergic respiratory disorder by administering orally a composition of **lactoferrin** alone or in combination with metal chelators to treat respiratory disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:13374 USPATFULL
TITLE: Oral **lactoferrin** in the treatment of respiratory disorders
INVENTOR(S): Glynn, Peter, Houston, TX, UNITED STATES
Varadhachary, Atul, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2004009896 | A1 | 20040115 | |
| APPLICATION INFO.: | US 2003-441329 | A1 | 20030520 | (10) |

| | NUMBER | DATE | |
|---|---|---|---|
| PRIORITY INFORMATION: | US 2002-383280P | 20020524 | (60) |
| | US 2002-410645P | 20020913 | (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095
NUMBER OF CLAIMS: 84
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 1476
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 10 OF 23 USPATFULL on STN
TI **Lactoferrin** in the treatment of malignant neoplasms and other hyperproliferative diseases
AB The present invention relates to methods of treating a hyperproliferative disease by administering a composition of **lactoferrin** alone or in combination with standard anti-cancer therapies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:13373 USPATFULL
TITLE: **Lactoferrin** in the treatment of malignant neoplasms and other hyperproliferative diseases
INVENTOR(S): Varadhachary, Atul, Houston, TX, UNITED STATES
Barsky, Rick, Houston, TX, UNITED STATES
Pericle, Federica, Houston, TX, UNITED STATES
Petrak, Karel, Houston, TX, UNITED STATES
Wang, Yenyun, Houston, TX, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2004009895 | A1 | 20040115 | |
| APPLICATION INFO.: | US 2003-434769 | A1 | 20030509 | (10) |

| | NUMBER | DATE |
|---|---|---|

| | | |
|---|---|---|
| PRIORITY INFORMATION: | US 2002-379442P | 20020510 (60) |
| | US 2002-379441P | 20020510 (60) |
| | US 2002-379474P | 20020510 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | FULBRIGHT & JAWORSKI, LLP, 1301 MCKINNEY, SUITE 5100, HOUSTON, TX, 77010-3095 | |
| NUMBER OF CLAIMS: | 99 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 5 Drawing Page(s) | |
| LINE COUNT: | 1683 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 11 OF 23 USPATFULL on STN

TI Methods and compositions of treating and/or preventing diabetic retinopathy with pericyte apoptosis inhibitors

AB A method of preventing or treating diabetic retinopathy is disclosed including administering to a mammal a therapeutically effective amount of an inhibitor of retinal pericyte apoptosis. Also disclosed is a pharmaceutical composition which treats and/or prevents diabetic retinopathy comprising as an active agent a therapeutically effective amount of at least one inhibitor of retinal pericyte apoptosis and a pharmaceutically acceptable carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | | | |
|---|---|---|---|
| ACCESSION NUMBER: | 2003:306854 USPATFULL | | |
| TITLE: | Methods and compositions of treating and/or preventing diabetic retinopathy with pericyte apoptosis inhibitors | | |
| INVENTOR(S): | Lecomte, Marc, Lissieu, FRANCE<br>Denis, Ulriche, Caluire et Cuire, FRANCE<br>Paget, Clarisse, Lyon, FRANCE<br>Wiernsperger, Nicolas, Orlienas, FRANCE<br>Lagarde, Michel, Decines, FRANCE | | |
| PATENT ASSIGNEE(S): | Merck Sante, a corporation of France, Lyon, FRANCE (non-U.S. corporation)<br>INSERM, a corporation of France, Paris, FRANCE (non-U.S. corporation) | | |
| | NUMBER | KIND | DATE |
| PATENT INFORMATION: | US 2003216290 | A1 | 20031120 |
| APPLICATION INFO.: | US 2003-421389 | A1 | 20030423 (10) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. WO 2001-FR3306, filed on 24 Oct 2001, UNKNOWN | | |
| | NUMBER | DATE | |
| PRIORITY INFORMATION: | FR 2000-13640 | 20001024 | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | APPLICATION | | |
| LEGAL REPRESENTATIVE: | IP DEPARTMENT OF PIPER RUDNICK LLP, 3400 TWO LOGAN SQUARE, 18TH AND ARCH STREETS, PHILADELPHIA, PA, 19103 | | |
| NUMBER OF CLAIMS: | 35 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 10 Drawing Page(s) | | |
| LINE COUNT: | 2046 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 12 OF 23 USPATFULL on STN

TI Identification of polynucleotides encoding novel helicobacter polypeptides in the helicobacter genome

AB The invention provides Helicobacter polypeptides that can be used in

vaccination methods for preventing or treating Helicobacter infection, and polynucleotides that encode these polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:226583 USPATFULL

TITLE: Identification of polynucleotides encoding novel helicobacter polypeptides in the helicobacter genome

INVENTOR(S): Kleanthous, Harold, Newtonville, MA, UNITED STATES
Al-Garawi, Amal, Brookline, MA, UNITED STATES
Miller, Charles, Medford, MA, UNITED STATES
Tomb, Jean-Francois, Baltimore, MD, UNITED STATES
Oomen, Raymond P., Ontario, CANADA

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2003158396 | A1 | 20030821 |
| APPLICATION INFO.: | US 2001-882227 | A1 | 20010615 (9) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-902615, filed on 29 Jul 1997, ABANDONED

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110

NUMBER OF CLAIMS: 38

EXEMPLARY CLAIM: 1

LINE COUNT: 2432

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 13 OF 23 USPATFULL on STN

TI Helicobacter GHPO 1360 and GHPO 750 polypeptides and corresponding polynucleotide molecules

AB The invention provides Helicobacter polypeptides, designated GHPO 1360 and GHPO 750, which can be used in vaccination methods for preventing or treating Helicobacter infection, and polynucleotides that encode these polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:206885 USPATFULL

TITLE: Helicobacter GHPO 1360 and GHPO 750 polypeptides and corresponding polynucleotide molecules

INVENTOR(S): Kleanthous, Harold, Newtonville, MA, UNITED STATES
Lissolo, Ling, Marcy I'Etoile, FRANCE
Tomb, Jean-Francois, Baltimore, MD, UNITED STATES
Miller, Charles, Medford, MA, UNITED STATES
Al-Garawi, Amal, Boston, MA, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2003143242 | A1 | 20030731 |
| APPLICATION INFO.: | US 2002-39183 | A1 | 20020103 (10) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-831310, filed on 1 Apr 1997, ABANDONED

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Susan M. Michaud, Ph. D., Clark & Elbing LLP, 176 Federal Street, Boston, MA, 02110

NUMBER OF CLAIMS: 39

EXEMPLARY CLAIM: 1

LINE COUNT: 2415

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 14 OF 23 USPATFULL on STN

TI Helicobacter polypeptides and corresponding polynucleotide molecules

AB The invention provides Helicobacter polypeptides that can be used in vaccination methods for preventing or treating Helicobacter infection, and polynucleotides that encode these polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

| | |
|---|---|
| ACCESSION NUMBER: | 2003:180314 USPATFULL |
| TITLE: | Helicobacter polypeptides and corresponding polynucleotide molecules |
| INVENTOR(S): | Haas, Rainer, Tuebingen, GERMANY, FEDERAL REPUBLIC OF<br>Kleanthous, Harold, Newtonville, MA, UNITED STATES<br>Tomb, Jean-Francois, Balitimore, MD, UNITED STATES<br>Miller, Charles, Medford, MA, UNITED STATES<br>Al-Garawi, Amal, Boston, MA, UNITED STATES<br>Odenbreit, Stefan, Ammerbuch, GERMANY, FEDERAL REPUBLIC OF<br>Meyer, Thomas, Tuebingen, GERMANY, FEDERAL REPUBLIC OF |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2003124141 | A1 | 20030703 |
| APPLICATION INFO.: | US 2001-988067 | A1 | 20011116 (9) |

| | |
|---|---|
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1997-831309, filed on 1 Apr 1997, ABANDONED |
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110 |
| NUMBER OF CLAIMS: | 38 |
| EXEMPLARY CLAIM: | 1 |
| NUMBER OF DRAWINGS: | 1 Drawing Page(s) |
| LINE COUNT: | 7446 |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 15 OF 23 USPATFULL on STN
TI Helicobacter antigens and corresponding DNA fragments
AB The invention provides Helicobacter polypeptides that can be used in vaccination methods for preventing or treating Helicobacter infection, and polynucleotides that encode these polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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|---|---|
| ACCESSION NUMBER: | 2003:100293 USPATFULL |
| TITLE: | Helicobacter antigens and corresponding DNA fragments |
| INVENTOR(S): | Haas, Rainer, Tuebingen, GERMANY, FEDERAL REPUBLIC OF<br>Kleanthous, Harold, Newtonville, MA, UNITED STATES<br>Meyer, Thomas F., Tuebingen, GERMANY, FEDERAL REPUBLIC OF<br>Odenbreit, Stefan, Ammerbuch, GERMANY, FEDERAL REPUBLIC OF<br>Al-Garawi, Amal A., Boston, MA, UNITED STATES<br>Miller, Charles A., Medford, MA, UNITED STATES |

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2003069404 | A1 | 20030410 |
| APPLICATION INFO.: | US 2001-13315 | A1 | 20011105 (10) |

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| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1996-749051, filed on 14 Nov 1996, ABANDONED |
| DOCUMENT TYPE: | Utility |
| FILE SEGMENT: | APPLICATION |
| LEGAL REPRESENTATIVE: | CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110 |
| NUMBER OF CLAIMS: | 39 |
| EXEMPLARY CLAIM: | 1 |

NUMBER OF DRAWINGS: 42 Drawing Page(s)
LINE COUNT: 4832
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 16 OF 23 USPATFULL on STN
TI HELICOBACTER POLYPEPTIDES AND CORRESPONDING POLYNUCLEOTIDE MOLECULES
AB The invention provides Helicobacter polypeptides that can be used in vaccination methods for preventing or treating Helicobacter infection, and polynucleotides that encode these polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2003:31115 USPATFULL
TITLE: HELICOBACTER POLYPEPTIDES AND CORRESPONDING POLYNUCLEOTIDE MOLECULES
INVENTOR(S): HAAS, RAINER, TUEBINGEN, GERMANY, FEDERAL REPUBLIC OF
KLEANTHOUS, HAROLD, NEWTONVILLE, MA, UNITED STATES
TOMB, JEAN-FRANCOIS, BALTIMORE, MD, UNITED STATES
MILLER, CHARLES, MEDFORD, MA, UNITED STATES
AL-GARAWI, AMAL, BOSTON, MA, UNITED STATES
ODENBREIT, STEFAN, AMMERBUCH, GERMANY, FEDERAL REPUBLIC OF
MEYER, THOMAS, TUEBINGEN, GERMANY, FEDERAL REPUBLIC OF

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2003023066 | A1 | 20030130 |
| APPLICATION INFO.: | US 1997-834705 | A1 | 19970401 (8) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1996-749051, filed on 14 Nov 1996, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PAUL T CLARK, CLARK AND ELBING, 176 FEDERAL STREET, BOSTON, MA, 021102223
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 4253
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 17 OF 23 USPATFULL on STN
TI Identification of polynucleotides encoding novel helicobacter polypeptides in the helicobacter genome
AB The invention provides Helicobacter polypeptides that can be used in vaccination methods for preventing or treating Helicobacter infection, and polynucleotides that encode these polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:287593 USPATFULL
TITLE: Identification of polynucleotides encoding novel helicobacter polypeptides in the helicobacter genome
INVENTOR(S): Kleanthous, Harold, Newtonville, MA, UNITED STATES
Al-Garawi, Amal, Boston, MA, UNITED STATES
Miller, Charles, Medford, MA, UNITED STATES
Tomb, Jean-Francois, Baltimore, MD, UNITED STATES
Oomen, Raymond P., Schomberg, CANADA

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002160456 | A1 | 20021031 |
| APPLICATION INFO.: | US 2001-895913 | A1 | 20010629 (9) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-881227, filed on 24 Jun 1997, ABANDONED
DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110
NUMBER OF CLAIMS: 38
EXEMPLARY CLAIM: 1
LINE COUNT: 2170
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 18 OF 23 USPATFULL on STN
TI Identification of polynucleotides encoding novel helicobacter polypeptides in the helicobacter genome
AB The invention provides Helicobacter polypeptides that can be used in vaccination methods for preventing or treating Helicobacter infection, and polynucleotides that encode these polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:213702 USPATFULL
TITLE: Identification of polynucleotides encoding novel helicobacter polypeptides in the helicobacter genome
INVENTOR(S): Kleanthous, Harold, Newtonville, MA, UNITED STATES
Al-Garawi, Amal, Boston, MA, UNITED STATES
Miller, Charles, Medford, MA, UNITED STATES
Tomb, Jean-Francois, Baltimore, MD, UNITED STATES
Oomen, Raymond P., Ontario, CANADA

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002115078 | A1 | 20020822 |
| APPLICATION INFO.: | US 2001-881752 | A1 | 20010618 (9) |

RELATED APPLN. INFO.: Continuation of Ser. No. US 1997-833457, filed on 1 Apr 1997, ABANDONED
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110
NUMBER OF CLAIMS: 38
EXEMPLARY CLAIM: 1
LINE COUNT: 2137
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 19 OF 23 USPATFULL on STN
TI New cosmetic, personal care, cleaning agent, and nutritional supplement compositions and methods of making and using same
AB The present invention involves new cosmetic, personal care, cleaning agent, biocidal agent, functional food, and nutritional supplement compositions. These new compositions incorporate bioactive glass into cosmetics, personal care items, cleaning agents, biocidal agents, functional foods, and nutritional supplements. The present invention also involves methods of making and methods of using such compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:164425 USPATFULL
TITLE: New cosmetic, personal care, cleaning agent, and nutritional supplement compositions and methods of making and using same
INVENTOR(S): Lee, Sean, Karlsruhe, GERMANY, FEDERAL REPUBLIC OF
Kessler, Susanna, Ergolding, GERMANY, FEDERAL REPUBLIC OF
Forberich, Oliver, Oberursel, GERMANY, FEDERAL REPUBLIC OF
Buchwar, Claire, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF
Greenspan, David C., Grainsville, FL, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002086039 | A1 | 20020704 |
| APPLICATION INFO.: | US 2001-818466 | A1 | 20010327 (9) |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | US 2000-192261P | 20000327 (60) |
| | US 2000-197162P | 20000414 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KRAMER LEVIN NAFTALIS & FRANKEL LLP, 919 THIRD AVENUE, NEW YORK, NY, 10022
NUMBER OF CLAIMS: 134
EXEMPLARY CLAIM: 1
LINE COUNT: 4825
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 20 OF 23 USPATFULL on STN
TI 76 KDA HELICOBACTER POLYPEPTIDES AND CORRESPONDING POLYNUCLEOTIDE MOLECULES
AB The invention provides 76 kDa Helicobacter polypeptides, which can be used in vaccination methods for preventing or treating Helicobacter infection, and polynucleotides that encode these polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:84910 USPATFULL
TITLE: 76 KDA HELICOBACTER POLYPEPTIDES AND CORRESPONDING POLYNUCLEOTIDE MOLECULES
INVENTOR(S): KLEANTHOUS, HAROLD, NEWTONVILLE, MA, UNITED STATES
LISSOLO, LING, MARCY L'EBOILE, FRANCE
TOMB, JEAN-FRANCOIS, BALTIMORE, MD, UNITED STATES
MILLER, CHARLES, MEDFORD, MA, UNITED STATES
AL-GARAWI, AMAL, BOSTON, MA, UNITED STATES

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 2002044949 | A1 | 20020418 |
| APPLICATION INFO.: | US 1997-834666 | A1 | 19970401 (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PAUL T CLARK, CLARK AND ELBING, 176 FEDERAL STREET, BOSTON, MA, 021102223
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 5002
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 21 OF 23 USPATFULL on STN
TI HELICOBACTER GHPO 1360 AND GHPO 750 POLYPEPTIDES AND CORRESPONDING POLYNUCLEOTIDE MOLECULES
AB The invention provides Helicobacter polypeptides, designated GHPO 1360 and GHPO 750, which can be used in vaccination methods for preventing or treating Helicobacter infection, and polynucleotides that encode these polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2002:43666 USPATFULL
TITLE: HELICOBACTER GHPO 1360 AND GHPO 750 POLYPEPTIDES AND CORRESPONDING POLYNUCLEOTIDE MOLECULES
INVENTOR(S): KLEANTHOUS, HAROLD, NEWTONVILLE, MA, UNITED STATES

LISSOLO, LING, MARCY I'ETOILE, FRANCE
TOMB, JEAN-FRANCOIS, BALTIMORE, MD, UNITED STATES
MILLER, CHARLES, MEDFORD, MA, UNITED STATES
AL-GARAWI, AMAL, BOSTON, MA, UNITED STATES

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 2002026035 | A1 | 20020228 | |
| APPLICATION INFO.: | US 1997-831310 | A1 | 19970401 | (8) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PAUL T CLARK, CLARK AND ELBING, 176 FEDERAL STREET, BOSTON, MA, 021102223
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
LINE COUNT: 2430
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 22 OF 23 USPATFULL on STN
TI Anti-microbial compositions
AB Anti-microbial compositions are described which contain iodide and thiocyanate anions, an oxidoreductase enzyme, namely glucose oxidase, and its corresponding oxidisable substrate, D-glucose. Such compositions may advantageously further comprise a peroxidase such as lactoperoxidase. The compositions have excellent anti-microbial properties effective against bacteria yeasts and moulds. The compositions may be provided in concentrated substantially non-reacting forms such as dry powders and non-aqueous solutions which may be diluted to provide compositions with broad spectrum anti-microbial activity. Compositions may be used as preservatives or as active agents providing potent anti-microbial activity of use in oral hygiene, deodorant and anti-dandruff products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 97:17908 USPATFULL
TITLE: Anti-microbial compositions
INVENTOR(S): Galley, Edward, Nottinghamshire, England
Godfrey, Dene C., Nottinghamshire, England
Guthrie, Walter G., Nottinghamshire, England
Hodgkinson, Darren M., Nottinghamshire, England
Linnington, Helen L., Nottinghamshire, England
PATENT ASSIGNEE(S): The Boots Company PLC, Notts, England (non-U.S. corporation)

| | NUMBER | KIND | DATE | |
|---|---|---|---|---|
| PATENT INFORMATION: | US 5607681 | | 19970304 | |
| | WO 9111105 | | 19910808 | |
| APPLICATION INFO.: | US 1992-916137 | | 19920730 | (7) |
| | WO 1991-EP208 | | 19910130 | |
| | | | 19920730 | PCT 371 date |
| | | | 19920730 | PCT 102(e) date |

| | NUMBER | DATE |
|---|---|---|
| PRIORITY INFORMATION: | GB 1990-2422 | 19900203 |
| | GB 1990-24496 | 19901110 |

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Dodson, Shelley A.
LEGAL REPRESENTATIVE: Nikaido, Marmelstein, Murray & Oram LLP
NUMBER OF CLAIMS: 52
EXEMPLARY CLAIM: 1

LINE COUNT: 1703
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 23 OF 23 USPATFULL on STN
TI Oral immune globulin
AB There is disclosed an oral pharmaceutical composition for therapeutic use comprising a therapeutically effective amount of orally administerable immune globulin in a pharmaceutically acceptable carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 84:58165 USPATFULL
TITLE: Oral immune globulin
INVENTOR(S): Hardie, W. Richard, Walnut Creek, CA, United States
PATENT ASSIGNEE(S): Cutter Laboratories, Inc., Berkeley, CA, United States (U.S. corporation)

| | NUMBER | KIND | DATE |
|---|---|---|---|
| PATENT INFORMATION: | US 4477432 | | 19841016 |
| APPLICATION INFO.: | US 1982-365759 | | 19820405 (6) |

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1981-259758, filed on 1 May 1981, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rosen, Sam
LEGAL REPRESENTATIVE: Aston, David J., Johnson, Lester E., Leitereg, Theodore J.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
LINE COUNT: 350
CAS INDEXING IS AVAILABLE FOR THIS PATENT.